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THE TWO ASPECTS OF SCHIZOPHRENIA*

BY SILVANO ARIETI, M.D.

Some readers may wonder about the title of this paper. Does schizophrenia really present two aspects rather than one total picture? Are there only two aspects of schizophrenia, and is schizophrenia the only condition which presents these two aspects? It must be said that the two aspects that will be discussed are not found in schizophrenia alone, and that if the writer has chosen to illustrate them in reference to this mental disorder it is solely because he feels more familiar with this subject. He is also not denying that other people may see other aspects in schizophrenia, besides the two to be discussed, although the writer feels that all the other aspects may be subsumed under these two.

The first aspect is schizophrenia seen as an experiential condition. By experiential condition, is meant a condition which is to be explained in view of the life experiences of the individual. From birth to the outbreak of the disorder, certain experiences have occurred in the life of the patient, continuously or intermittently, related to one another or unrelated, which have led to and which explain the mental disorder. The second aspect is schizophrenia seen as an extra-experiential condition: that is, as a condition presenting certain phenomena which cannot be totally explained in view of the life experiences of the patient. In this discussion, these two aspects will be taken into consideration separately.

The first aspect is of course the result of psychodynamic studies. The writer belongs to the group of psychiatrists who have accepted some revisions of Freud's dynamic formulations, in accordance with the findings of Sullivan and, to a lesser degree, of other persons who have not worked directly in the field of psychiatry, like George Mead and Martin Buber. Martin Buber, a philosopher, George Mead, a social psychologist, and Harry Stack Sullivan, a psychiatrist, came—from separate fields—to the same conclusion, that the human being is to a large extent experiential,

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or the result of his relations with others. Mead[1] states that "the generalized other" is acting within ourselves, when we assume roles in which we think others see ourselves—and we do so continuously. Sullivan[2] teaches that the self consists of reflected appraisals, appraisals coming from the significant adults—those significant to the child. Buber[3] writes that there is no I without Thou. The I is composed to a great extent of the Thou. He who says I implies Thou. The person emerges from this relationship with the other, the Thou.

In accordance with these simple but revolutionary premises, the field of psychiatry may be seen to a large extent as the study of what goes on or goes wrong between the I and the Thou. Schizophrenia is particularly suited as an illustration of an altered relationship.

The Thou of every infant is to a large extent the mother, who must accept him into a social world, and provide him, at least in the first few years of life, with what he needs to develop his I. The acceptance of the child by the mother will make the child accept the mother. An I-Thou relationship is established, which leads to the psychological development of the individual and to his integration in society.

But if this relationship between the child and the mother is an extremely disturbed one, if the child is strongly rejected or surrounded by an atmosphere of overwhelming anxiety, an abnormal situation will exist which may have two effects:

1. The result may be so disastrous for the psychological development of the child that he will develop childhood schizophrenia or conditions ranging from the early infantile autism described by Kanner[4] to serious disorders in ego development.

2. Although the relationship is very unhealthy, the child may manage to grow physically and psychologically by the help of strenuous defenses, which, however, confer on him a greater vulnerability to certain circumstances and greater propensity to disintegration, so that in adult life he is liable to develop schizophrenia.

Only the second possibility is taken into consideration here, and only in some of its main points. According to the writer's studies, it is around the beginning of the second year of life that the schizophrenogenic situation begins. On account of the rela-

tively advanced stage of myelinization of the cortex, the child is then in a position to anticipate the future, to use higher forms of symbolism and to start to assume roles which the significant adults confer on him. These capacities permit him, however, to experience the anxiety that originates from unhealthy interpersonal relationships.

No basic trust in people, no promise of life is apprehended by the child in this situation—only feelings of anxiety and rejection. The rejection is generally not openly manifested, but is subtle, is very severe and, most of the time, comes from both parents.

The mother is the most important factor. Her hostility may be covered by apparent amiability or may be totally unconscious. In many cases the mother is not hostile but is extremely anxiety-ridden; and although she tries her best, her anxiety and guilt feelings have a crippling effect on the child. The father may be less directly destructive than the mother, but he fails too, inasmuch as, for various reasons, he is unable to compensate for the mother or to offer the child at least a little bit of what he should get from the mother. In this period of childhood, generally at least during the second and third year of life, there is a time of intense relatedness between parent and child. But this relatedness is anxiety-producing on both sides; that is the parent arouses anxiety in the child, and the child arouses it in the mother. The interpersonal relation is unhealthy and traumatic.

To use Buber's terminology, in this period of the life of the pre-schizophrenic, there is an intense I-Thou relationship. But the Thou is already pathological and cannot be entirely accepted by the I, cannot become a very consistent and well-integrated part of the I. This is the very beginning of the schizophrenic cleavage, this never-complete acceptance of the Thou, or of the social self, of that part of the self which originates from others. This Thou, which is not completely accepted or integrated, tends to remain or to become dissociated, something like a foreign body, something which is easily externalized, as we shall see later, in forms of projections and hallucinations.

Furthermore, one notices in the childhood of pre-schizophrenics, from the second to the fifth year of life, a certain inconsistency in what the child represses from consciousness. At times he succeeds in repressing to a certain extent the bad images that

he forms of the parents, especially of the mother.[5] But these unconscious images may come back to consciousness to a certain extent, or may be transformed into symbolic forms later on in life. In a minority, though a large minority, of schizophrenics, the bad image of the mother is totally repressed and almost totally replaced by the image of the good omnipotent mother, corresponding to the image of her which the child had built during the first year and the first half of the second year of life. This maternal image, however, is associated with babyhood, and, in a certain way, predisposes to regression and to total dependency. The patients of this minority, later in life see the world divided into two groups: On one side are all the people of the world who are experienced as hostile and threatening; on the other, is only one person, the mother, or an equivalent symbolic reproduction of her, who is omnipotent and protective, and on whom the patient feels he must depend entirely in a parasitic way—even for the basic functions of life.

Another important fact in this second-to-fifth-year period of life is the difficulty that the pre-schizophrenic child experiences in the development of his self-image. If by self-image we mean a composite of the body-image, of self-identity and self-esteem, we find that all these components are unhealthy and poorly organized in the pre-schizophrenic. Because the patient is rejected by both parents and cannot identify easily with either one, he may have difficulty in identifying with either sex. He may not entirely accept either heterosexuality or homosexuality and may maintain some unconscious uncertainty about his own sex. Being unable to take the roles of others, he grows, without grasping very well a sense of his role in his family and in society. The promise of life is indefinite and uncertain, and self-identity is distorted. He has the feeling that he is worthless, inadequate, almost always doing the wrong thing.

Now the important and very amazing fact is that even in the presence of the conditions that have been mentioned, the child will find some equilibrium and has more probability of not developing schizophrenia during his life than of developing it.

This amazing fact is due to certain defenses that he is able to put up even in the face of the disturbing experiences mentioned, and most of the time these defenses work. A common but not

necessary defense consists of developing a schizoid personality, just as many neurotics and persons with character disorders do. By becoming schizoid, the patient removes from his life that early intense relatedness which has been mentioned, and which was so destructive. He represses emotions to a certain extent and achieves several useful compromises. The bad images of the parents, which have remained half-conscious, are more tolerable because less anxiety-provoking; moreover, the self-image of being inadequate and worthless is also less anxiety-provoking and less traumatic. If one again follows Martin Buber's conceptions, it may be stated that during this period of adoption of a schizoid personality the I-Thou relationship is limited and constricted both quantitatively, in the sense that the relations involved are fewer and qualitatively, in the sense that the relatively few interpersonal relations left are less intense.

Let us remember, however, that an I-Thou relationship is maintained, even if limited. And here the writer wants to add something which was suggested by the application to psychiatry of Buber's basic formulations. Men do not have merely an I-Thou relationship but also an I-It relationship, that is, a relationship between the person and the inanimate world. This type of nonpersonal relationship is a normal component of life. However, the neurotic person who has difficulties in interpersonal relations, tries to change the I-Thou relationship into an I-It relationship. In other words, he tries to treat people as things; he depersonalizes them. For instance, people become machines, sex a biological phenomenon; human relations become scientific experiments, and so on. Even the analyst becomes a psychoanalytic machine which renders a service. Now, although this type of defense is found in many schizoid personalities, it is never, or almost never, found in the schizoids who become schizophrenics. The pre-schizophrenic schizoid is deprived of this neurotic mechanism. He cannot translate the personal into the impersonal. As a matter of fact, one sees the opposite process in operation toward the beginning of the overt psychotic illness. The impersonal tends to be personalized. Whatever happens is never attributed to chance or to physical events. Everything is anthropomorphized and seen as a consequence of a personal will.

The schizoid is not the only type of personality found in pre-

schizophrenics. The writer has frequently found in them another type of personality which is not so well known in the psychiatric literature as the schizoid and which is much more difficult to define. This is what he has designated as the stormy personality.[5] People with stormy personalities have not found that detachment is a consistent protection against anxiety. They do not like to restrict the I-Thou world, as the schizoid does, but want to retain it. In their attempt to gain parental approval and love, they have tried all types of attitudes toward the parents. At times they are extremely submissive and compliant, at times aggressive, at times very detached. They try all possible means of defense because, actually, no means offers a sure protection from anxiety. This variety of reactions has been enhanced by the inconsistency of the parents. The stormy personalities have acquired a capacity to change their attitudes toward life repeatedly, at times slowly, oftener suddenly and drastically. They continuously change their ways of relatedness, their I-Thou worlds, and do not develop strong senses of self-identity. They do not withdraw, they try to reach people, but every time they try, they are hurt. They often experience very strong conscious anxiety, which leads them repeatedly to crises.

These types of personality have more or less protected the patients from the vulnerability that was acquired during early childhood. To a certain extent the defenses have succeeded. The patients are able to grow and develop during later childhood, at times for long periods after puberty. In persons, however, who are not so fortunate, these personality defenses are less and less sufficient; after puberty they may even cripple the patient more. The pre-psychotic schizoid person who, as has been mentioned, still lives in an interpersonal world, feels "pushed around" when the environmental forces compel him to do things in spite of his withdrawal. He is harassed on all sides. On one side, the reduction of experiences has made him awkward and has increased his fears; on the other, the early unhealthy experiences, which he may have forgotten, continue to alter, or to give a particular coloring to, his present experiences. Symbolically, every interpersonal situation is a reproduction of the old parent-child relationship; a compulsive attitude very often compels the patient to make this reproduction more like the original situation than

he actually has to make it. Furthermore, in spite of his detachment the patient maintains the self-image of the bad child; but to be bad now means to be incapable, inadequate, worthless. Handicapped as he is, he is prone to fail; and, any time he fails, his self-esteem is injured more. Similar observations could be made about the patient with a stormy personality. The latter tries to reach people and to make excursions into life, but these excursions provoke crises which progressively weaken his resistance.

When all defenses have collapsed and the patient is unable to cope with anxiety, he resorts to psychotic mechanisms which seem to offer immediately apparent benefits. There is a pseudo-rise in self-esteem. To the patient, the difficulties seem no longer general in character, but restricted to specific situations. For instance, if the patient follows a paranoid pattern, he will not see himself any longer as the worthless person he thought he was, but as the victim of malevolent people. Before the onset of the psychosis, he thought everybody was justified in having a low opinion of him; now he feels that only a few powerful, malevolent people are unfair toward him, and victimize him. There is, therefore, a symbolic reproduction of a situation which existed in childhood, except that generally the persecutors in the psychosis are not the parents, but other people who represent them symbolically. This development of the projection mechanism in the paranoid type of schizophrenia may be viewed as consisting of three stages which succeed one another at different periods in the life of the patient.

First is the stage of introjection. The actions and attitudes of the parent are external and are being introjected. The I-Thou relationship is in the making, but has an unhealthy beginning on account of the pathogenic attitude of the parent. Second, is the stage of assimilation. The child has accepted the parent's attitude toward him. He sees, accuses and hates himself, as he feels the parents hated him. The Thou has become part of the I. But the Thou is unhealthy, and its assimilation produces low self-esteem and a shaky self-image. In other words, the I is unstable and liable to fragment. Third, is the stage of projection or the psychotic stage. Now, the I is fragmenting, and some fragments are externalized. This is accomplished by the patient's rejecting and projecting back to symbolic parents those attitudes

toward himself he now rejects. The Thou is rejected. It is too unpleasant. The rest of the self is not going to accept it any longer. Self-condemnation is no longer part of the self; now condemnation comes from the persecutor. The persecutor is the Thou or a symbolic reproduction of the parent. But in order to remove the Thou, or the interpersonal world, which has caused so much torment, the patient remains with an impoverished and very sick I, a psychotic I.

As an example, a patient who has been written about elsewhere will be mentioned briefly.[6] This patient, a 32-year-old man, suffered from transient psychotic episodes for about two years. When he did not present psychotic symptoms, he showed a detached, shy, aloof personality. In his early childhood, he had had a vague feeling that his parents had unjustly accused him. Later this feeling changed into a feeling of self-accusation.

In other words, he was then accepting the accusations. He was the self-admitted bad boy who was causing so much trouble and suffering to his parents. Feelings of guilt and of inadequacy persisted through adolescence and adult life, although the patient had developed a predominantly schizoid personality as a defense. During his psychotic episodes, which were always precipitated by anxiety-arousing events at a reality level, these feelings of guilt, self-hatred and unworthiness disappeared. He had the idea, however, that FBI agents were after him, unjustly accusing him of participating in subversive activities.

Summarizing, the patient who has failed to defend himself, either because he could not find a suitable I-Thou relationship, as in the stormy personality, or because he could not change the I-Thou into an I-It relationship, or because the limitations of his I-Thou world could not protect him sufficiently from anxiety, must resort to a gigantic removal of the Thou—which makes him psychotic. This entails a process of desocialization and desymbolization, by means of which even society at large and its symbols are removed from the I. But at the same time that the process of rejection of the Thou or social self takes place, a return of the primordial I, or of the archaic ego, with autistic tendencies and primitive mechanisms, will occur. This process will be briefly discussed a little later. At this present point, some conclusions must be drawn.

The aspect of schizophrenia that is seen as a consequence of what has occurred in the life history of the patient, is a very important one indeed. It explains a great deal. But let us ask ourselves: With this method can we explain everything about schizophrenia? Assuming that we had known every detail about the life history of the patient from birth to the onset of the illness, could we have predicted with absolute certainty that he would have developed schizophrenia? The answer is "no." We could have predicted that the patient *probably* would have developed schizophrenia, but we could not have made a more definite statement.

Let us ask ourselves a second question. Can the experiential data explain the formal mechanisms of the derangement, like hallucinations, thought disorders, catatonic postures, etc.? The answer is again, "No." For instance, if a female patient hears a hallucinatory voice accusing her of being a bad woman, the experiential past of the patient may explain to us that this voice is an externalization of an inner feeling of guilt and self-condemnation, previously introjected from her parents, most probably her mother. But it will never explain why this guilt feeling did not remain just a guilt feeling, as in the average neurotic, but became transformed into an auditory perception.

As useful and prolific as the experiential formulations are in their self-contained systems, they cannot penetrate the formal nature of the phenomena and cannot yield absolute predictability and validation. The reason for these limitations is to be found in the nature of the psychodynamic method. There should be a few general theoretical digressions here, perhaps of a philosophical nature, which the writer considers very important in this era of psychiatric reorientation, even if they seem unrelated to clinical practice.

The experiential method is a historical method. It is the method which we psychiatrists call psychodynamic and which the anthropologists call ideographic. Fundamentally, it studies the history of the individual as a historian studies the history of a country or people. Now history is not a science, as Aristotle taught long ago.[7] For instance, a historian who has studied past and present data about a country may predict that a revolution or a civil war will *probably* occur in that country. He will say "probably" but

not "certainly." He lacks the certainty with which an astronomer, let us say, is capable of predicting an eclipse at such-and-such a time. In dynamic psychiatry, we are in the same situation as that of the historian. Many may object to this view of dynamic psychiatry as history and not science. It may be said, for instance, that the lack of scientific certainty is caused by the fact that in our clinical contacts we never reach a point where we know all the data. Were we to know all the facts, we could predict with scientific certainty. In other words, the argument is that the historical method is a primitive and inaccurate method, but is scientific. But if we accept this point of view, we must eliminate from life the elements of creativity, chance and free will, which are important in dynamic psychology; and we must reduce everything to mechanical determinism.

The foregoing statement should not convey the idea that the writer belittles the dynamic method; on the contrary, he considers this method very important. As a matter of fact, it is at the present stage of our knowledge, the most important method we have—even if not scientific, or rather because it is not scientific. It is the only one which gives us access to the I-Thou world. It does not give us laws, but it gives us useful general directions and permits us to determine certain relative empirical regularities.

It is the author's belief, as well as that of many other workers, that in psychiatry one must use both methods, the dynamic and the scientific. By complementing the one with the other, we may obtain a more complete picture of our field. Whereas the dynamic method deals chiefly with the specific events of the patient and with his life history, the scientific or formal method requires the study of facts which include, but also transcend, the specific patient. From a philosophical point of view, this method implies that the psyche of the infant is not a *tabula rasa* at birth as Locke and the other empiricists assumed, but rather that some formal mechanisms, at least in a state of potentiality, exist before experiential life, as Leibnitz and Kant thought.

The phenomena which are studied with this method are not specific characteristics of the patient, but are potentially universal and likely to occur in every person. For instance, according to an interpretation shared by many people, including this writer, many schizophrenic symptoms can be interpreted as a resurgence

of archaic mechanisms which are in a potential state of activation in every man.

This interpretation by no means implies an adherence to Jung's theory of the collective unconscious. Jung explains the motivation and content of feelings, thoughts and symptoms by factors which transcend the life history of the individual, whereas the writer believes that only the formal structure of the mental mechanisms is based on pre-experiential factors.

In order to avoid anxiety, in order to reject the Thou-world (the Thou which is in the I and which causes so much distress), the schizophrenic, after having vainly tried other less drastic ways, resorts or regresses to methods of thinking which preceded the development of the Thou-world in the course of evolution. The patient withdraws from a way of reasoning which is logical and is shared by society, and adopts an archaic or paleological way of thinking. He also withdraws from a system of symbolization shared with his fellow human beings, and adopts his own private symbols or paleosymbols. The withdrawal is possible because the archaic or autistic mechanisms are within him as inborn potentialities, not as experiential phenomena. These mechanisms are part of his biological entity and are, therefore, susceptible to formal or scientific studies. The same reasoning could be applied to other mental phenomena, for instance to dreams, which use some of the same formal primitive mechanisms.

It is impossible to give a description here of primitive or paleologic thinking or a detailed account of how this type of thinking originated in the evolution of the human race.[8] It will be noted briefly only that it must be considered an intermediary step between two very different stages. Infrahuman mental functions are based mostly on conditioned reflexes or, to use Susanne Langer's terminology, they are capable only of signs.[9] Signs are things which stand for other things, which are present or about to be present. For instance, the ringing of the bell is a sign for the trained dog that food is present or about to be present. For the dog, the ringing of the bell is a part of a whole (ringing of the bell and food). In other words the dog cannot abstract the ringing of the bell from a total situation in which ringing of the bell and exposure to food are connected. He will respond, in the same way, that is with secretion of gastric juice, to any part of this situation.

The complete abstraction of a part from the whole will be possible only when an animal (man) has evolved to such a point as to separate the sign from the object itself, or from a situation in which the object is present. He can then react to the "sign," as he would react to the object, even when the object is absent. But the "sign" is then not a sign any longer; it is a *symbol.* If the symbol produces the same effect on more than one person it is a *social* or *common symbol.* But between these two levels of the sign and of the social symbol, there is the intermediate level of the *paleosymbol,* to which the schizophrenic regresses. Paleosymbols tend to remain private, or exclusive, property of the person who creates them. They tend to remain part of the specific situation to which they refer, or to be connected with it, or to be identified with it.

This type of thinking, which is at a paleologic and paleosymbolic level, does not use our common Aristotelian laws of logic, but its own—which are more primitive, and which lead to conclusions that according to Aristotelian logic are not valid. The most important of these primitive laws is the principle of Von Domarus, which notes that in this type of thinking two subjects are identified if they have a predicate (part or quality) in common.[10] For instance, father and king may be identified by the patient or the dreamer because they both have positions of authority. The Von Domarus principle implies an inability to abstract. When a part or a predicate (like the position of authority) cannot be abstracted from (brought out as a separate idea from) two or more subjects, these subjects tend to become fused or identified in the paleologic mind.[11] The studies of Vico,[12] Cassirer,[13] Goldstein,[14] and Werner,[15] have helped a great deal in understanding this type of thinking, and in connecting it with Freudian symbolism.

The writer has given particular consideration to primitive thinking, but a return to lower levels implies many additional mechanisms which cannot be discussed here, such as the resurgence of primitive habits, which are also susceptible of phylogenetic interpretations.[16] When the patient regresses to a lower level, two sets of phenomena appear, in accordance with the principles of Hughlings Jackson:[17] (1) He loses the functions of the level he withdraws from; and (2) he acquires some functions of the level which was previously inhibited.

A schizophrenic regresses to a lower level in order to escape anxiety. His attempt, however, in the majority of cases, is doomed to failure for the following reason: He *regresses* but does not *integrate* at a lower level. His biological organization and his previous life experiences are organized for a higher level of integration. If he regresses to a lower level he is maladjusted and disintegrated. He may be compared roughly to an animal which, in a surgical experiment, has been deprived of the cerebral cortex. This animal does not function like a healthy animal of a lower species, which does not naturally possess a cerebral cortex. It is in a pathological condition because its whole organism, each part of it, had an integration which required the cerebral cortex. In the same way, the regressed schizophrenic finds himself in a state of disintegration and disequilibrium. The few interpersonal contacts which are left, in spite of the process of desocialization, make his situation worse, because now he is even less equipped to cope with them. His condition then becomes progressively worse because the disinhibited functions, or Jackson's negative symptoms, resurge vigorously and produce a state of great confusion and disequilibrium. This is a state which nature does not accept. How does the organism defend itself from it? With further regression. The cycle thus repeats itself all over again, and the schizophrenic continues to regress.

At this point, the writer may attempt to conclude by saying that, whereas the schizophrenic processes of altered relatedness have to be studied predominantly psychodynamically, the disorder is also susceptible of formal scientific studies.

These two aspects reveal a fundamental dichotomy in the approach to schizophrenia. It is an old dichotomy: not the dichotomy between body and soul, which is obsolete today, but, as Tillich[18] says, a dichotomy between essence and existence and, one may add, between the universal and the particular, the form and the content, between mechanical and teleologic causality. In other words, it is the same dichotomy which is inherent in whatever pertains to the life of man.

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AN APPRAISAL OF EXISTENTIAL ANALYSIS. II.*

BY EUGEN KAHN, M.D.

VIII

Medard Boss is a writer of a fertility equal to Binswanger's. Of all the practising psychiatrists who have accepted Heidegger's teaching, he appears to be closest to the teacher. Boss writes with a tremendous élan, with an admirable vocabulary and, like Binswanger, with the obviously unswerving conviction of being a prophet of a new, unshakable truth.

Boss explains that he considers the "psychotherapeutic practice and technique"[113] of psychoanalysis according to the "'basic rules' of Freud"[114] valid. He writes "that Freud could intuitively invent all his 'basic rules' of psychoanalytic practice, but was able to support them only with astonishingly superficial and unsafe arguments." An analytical cure is not decisive for: "If a psychotherapist experiences the essence of man as existence in the sense of Martin Heidegger, he will speak of complete cure only when a formerly sick man becomes able to comprehend himself, as it were, as a light out of concealment of Being, a light in whose shining all things and fellowmen may unfold according to their own essence."[115]

Existential analy*tics*, *Daseinsanaly*tik, "has nothing at all to do with therapeutic practice, with practical intentions and purposes. As the fundamental ontology of Martin Heidegger, it asks 'only' for the Being of all being, . . . for the mode of existence of man and his belonging to Being. Even there where existential analy*tics* is modified and restricted to Ludwig Binswanger's existential analy*sis* as a merely anthropological method of research,

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Part two of a two-part discussion of *Daseinsanalysis*, appearing in successive issues of THE PSYCHIATRIC QUARTERLY.

113. "*psychotherapeutische Praxis und Technik* (Boss).

114. "'*Grundergeln' Freuds*" (Boss).

115. "*Erfährt jedoch ein Psychotherapeut das Wesen des Menschen als Existenz im Sinne Martin Heideggers dann wird er von einer vollen Heilung erst reden, wenn sich ein bisher kranker Mensch gleichsam als ein Licht aus der Verborgenheit des Seins zu begreifen vermag, in dessen Schein sich alle Dinge und Mitmenschen ihrem eigenen Wesen nach entfalten dürfen*" (Boss).

it is nothing else but phenomenological examination and elucidation of essence of the healthy and sick human existence."[116] Boss discusses the necessity "of a definite *Weltanschauung* or metaphysics without which he (the physician) would not want to help at all."[117] He calls this the doctor's "Faith"[118] "based on the desire to open to our patients the way to their being fully human."[119] Boss does not leave us in any doubt about his *Weltanschauung* or metaphysics, or if one wants to call it so: his faith. It is grounded in Heidegger's teaching. It is as though he were backing up Freud's psychoanalytic technique with the theory offered in Heidegger's ontology.

Boss seems to have oriented his thinking according to Heidegger's ideas. Using and admiring psychoanalytic technique, Boss writes: "The marvelous unity and conciseness of the psychoanalytical theory of perversions had to be gained through a very far-reaching loss of reality and an enormous rape of reality . . . the dynamisms and mechanisms are 'assumed' . . . nothing but products of thinking attributed to the given reality."[120] The implication is that existential analy*tics* is dealing with reality, that the findings arrived at on its background *are* reality. We are not informed exactly what reality Boss has in mind. However, Heidegger's existential analy*tics* is interpretation. Why this particular manner of interpretation should get hold of reality, is never ex-

116. "*Denn Daseinsanalytik an sich hat . . . mit praktischen Absichten und Zwecken nicht das geringste zu tun. Als Fundamentalontologie Martin Heideggers frägt sie 'nur' nach dem Sein alles Seienden . . . nach der Seinsart des Menschen und dessen Zugehörigkeit zum Sein. Auch dort noch, wo sich die Daseinsanalytik zur Daseinsanalyse Ludwig Binswangers als einer rein anthropologischen Forschungs methode modifiziert und einschränkt, will sie nicht anderes als phänomenologische Untersuchung und Wesenserhellung des gesunden und kranken menschlichen Dascins betreiben*" (Boss).

117. "*einer ganz bestimmten Weltanschauung oder Metaphysik, ohne die er (der Arzt) würde gar nicht helfen wollen*" (Boss).

118. "*Glaubenshaltung*" (Boss).

119. "*Das gesamte ärztliche Denken und Handeln . . . (sollte) von dem Bestreben getragen sein, unseren Kranken den Weg zu ihrem vollen Menschsein zu bahnen*" (Boss).

120. "*Die grossartige Einheitlichkeit und Geschlossenheidt der psychoanalytischen Perversionstheorie hatte . . . mit einem sehr weitgehenden Wirklichkeitsverlust und einer enormen Wirklichkeitsvergewaltigung erkauft werden müssen . . . die bloss 'angenommenen' Dynamismen und Mechanismen . . . lediglich der gegebenen Wirklichkeit zugeordnete Denkprodukte sind*" (Boss).

pounded. One must submit that at best it is a manner of interpretation by which its psychiatric adherents believe they get closer to what they mean by reality.

Boss berates the physicians for their biologistic-mechanistic attitude and thinking, and does not tire of telling them that human existence, *Dasein* in the sense of Heidegger, comes first. He deems necessary "a thinking which does not simply transfer the former objective notions about the human body onto the psychic realm, but which tries to see both in a basically new manner according to the unobjective essence of human existence to which all bodily and psychic phenomena belong."[121] Objectivity appears to be replaced by belief in the reality of the material gained by the phenomenological method. Even forgetting the observations submitted in the foregoing, one cannot but remain skeptical in regard to the reality and immediacy of the phenomena the existential-analytically oriented psychiatrist deals with: Do these phenomena *de facto* originate in the patient? One could formulate more succinctly: The patient is steered toward or helped into a world of alleged reality where the meanings provided by the analyst play a predominant role.

Boss wants to get rid of the body-soul dualism and proposes to accomplish this with existential analy*tics*. Human existence is "spiritual;"[122] it is "carried out"[123] in the body, its organs and its functions: "the body is bodying."[124] This is a point of particular interest. In his great enthusiasm, Boss does not seem to see that he is doing what many psychotherapists do; but he does it with the ample use of resounding words and with all the convert's fervor.

121. "*ein Denken, das nicht einfach die früheren gegenständlichen Vorstellungen über den menschlichen Körper auf den seelischen Bereich überträgt, sondern sowohl jenen wie dissen von Grund auf neu, entsprechend dem ungegenständlichen Wesen des menschlichen Daseins, dem alle leiblichen und seelischen Erscheinungen angehören, zu verstehen versucht*" (Boss).

122. "*geistig,*" see footnotes 15 and 95.

123. "*ausgetragen*" (Boss).

124. "*Der Leib leibt*" (Boss). The German words *Körper* and *Leib* must both be translated as "body." In the psychological and psychopathological literature there is a tendency to use the noun *Leib* whenever there is a reference to or an implication of the psyche or the spirit. This holds true also of Boss' use of the words. "*Der Leib leibt*" is a formulation quite obviously shaped after Heidegger's "*Das Nichts nichtet*" See footnote 25.

In his book *Sinn und Gehalt sexueller Perversionen,*[125] Boss emphatically agrees with Freud's statement: "The omnipotence of love is perhaps nowhere more clearly demonstrated than in its aberrations."[126] Boss writes that the fetishists and coprophiles are content "to see their mode of human existence and their world projects covered by the worldly barriers of dread, shame and disgust. Thus they become aware only of parts of the heterosexual *Gestalt* of human existence; love seems to shine only through rifts, and to become more or less transparent to them."[127] The disturbance that is begun with fetishists and coprophiles is continued by the kleptomaniacs, the exhibitionists, voyeurs and sadomasochists; in them "the narrowness, rigidity and resistivity of their worlds widens and strengthens increasingly, with the consequence that they can come to a loving communication only through an ever more violent breaking through of those worldly barriers."[128]

Of homosexual types, Boss distinguishes a variety of groups, each of which is "characterized by specific modes of existence and corresponding world projects."[129] Boss presents, among others, a homosexual woman who, because of a psychoneurotically-conditioned standstill of her maturation, fell into "this mode of human existence";[130] a schizophrenic man whose homosexuality was due "to a later psychotic re-disappearence of the world, to a secondary schizophrenic loss of his own self"[131] which brought about the "'perversion' of his love"[132] as a manifestation "of the same

125. "Sense and Content of Sexual Perversions."

126. "*Die Allgewalt der Liebe zeigt sich vielleicht nirgends stärker als in diesen ihren Verirrungen*" (Freud).

127. "*ihre Daseinsverfassung und ihre Weltentwürfe durch die weltlichen Schranken der Angst, der Scham und des Ekels derart verdeckt zu sehen, dass ihnen nur noch durch gewisse Ausschnitte der gegengeschlechtlichen Daseinsgestalt hindurch die Liebe mehr oder weniger transparent werden konnte*" (Boss).

128. "*die Enge, Starrheit und Widerständigkeit ihrer Welten (hatte sich) zunehmend ausgedehnt und verstärkt, sodass sie nicht mehr anders zu einer Liebeskommunikation zu gelangen vermochten, als dass sie diese Schranken auf immer gewaltsamere Art und Weise durchbrechen*" (Boss).

129. "*zeichnet sich durch ganz spezifische Seinsverfassungen und entsprechende Weltentwürfe aus*" (Boss).

130. "*diese Seinsverfassung*" (Boss).

131. "*einem nachträglichen psychotischen Wiederversinken von Welt, einem sekundären schizophrenen Selbstverlust*" (Boss).

132. "'*Pervertierung seiner Liebe*" (Boss).

schizophrenic shrinking and destruction of human existence."[133] In contrast to Freud, Boss sees this kind of homosexuality and the formation of delusions in the schizophrenic as parallel manifestations.

Boss notes that "an existential narrowness of personality,"[134] analogous to the narrowing assumed in the two instances just mentioned, may stem from "a genuine psychopathic *Anlage* and then result in a so-called constitutional homosexuality."[135] He describes such a case, a woman, Claudine (with two homosexual relatives on the paternal side) who resembled her father almost completely except for the sexual organs. She had a uterus bicornis like her mother. There was no possibility of changing her love life by means of psychoanalysis. Falling in love, Claudine loved her girl friend "as only a man can love a woman."[136] The world grew open to her in an unheard-of width and fullness. She felt herself reborn in a deeper sense than at her physical birth. Even death meant to this love not ending and nothinging . . . (but) . . . a door, an entrance, a signpost to eternal union."[137] Claudine, in fact, committed suicide when her brother intervened in her love. Concerning Claudine's father identification and her refusal to accept the female role, Boss observes: "It is grounded in the fact that Claudine's existence was in respect to body, impulse and spirit and their manifestations as a *Gestalt*, far-reachingly molded through the same 'constitutional' barriers, through the same 'hereditary *Anlagen*' as her father's . . ."[138]

One will admit that the mention of constitution and hereditary

133. "*derselben schizophrenen Schrumpfung und Zerstörung einer menschlichen Daseinsgestalt . . .*" (Boss).

134. "*existentielle Persönlichkeitsenge*" (Boss).

135. "*einer genuinen psychopathischen Anlage . . . und dann resultieren in einer sogenannten konstitutionellen Homosexualität . . .*" (Boss).

136. "*wie nur ein Mann eine Frau lieben kann*" (Boss).

137. "*Die Welt eröffnete sich ihr in einer unerhörten Weite und Fülle, sodass sie sich noch einmal 'und in einem tieferen Sinne als bei ihrer leiblichen Geburt' geboren fühlte. Selbst der Tod bedeutete dieser Liebe nicht Ende und Nichtigung . . .(sondern) wurde verwandelt in ein Tor, einen Eingang, in einen Wegweiser zu ewiger Verbundenheit*" (Boss).

138. "*Sie gründet vielmehr darin, die Existenz Claudines eben leiblich, triebhaft und geistig sehr weitgehend durch die gleichen 'konstitutionellen' Grenzen, durch die nämlichen 'Erbanlagen' in ihrer Erscheinungsgestalt geprägt wurde, wie es beim Vater der Fall war*" (Boss).

Anlagen, though put cautiously between quotation marks, betrays a considerable liberality in this author who so gravely condemns the medieval thinking of his biologistically-mechanistically oriented colleagues. His liberality is no less pronounced in his free use of psychoanalysis, although its background must appear mechanistic to him. He wants to do full justice to psychoanalysis, as is witnessed, for example, in the following observation: "We know that the world project is narrowed in a specific manner in the various pervert human beings. This knowledge permits us to comprehend how it happens that the Oedipus and castration complexes, which psychoanalysis has recognized as ubiquitous, can as important concretizations and points of break-through of existential dread, motivate once a 'normal,' another time a hysterical or a perverse personality . . ."[139] Despite Boss' desire to keep existential analy*tics* out of therapeutic practice, the practical and theoretical sides of his procedure are so close to each other that one is tempted to ask: What is explaining what to whom?

Boss' exposition and presentation is just as brilliant and entertaining in his two other books. One may turn to his dream book. Boss holds that dreamers "perceive the dream phenomena . . . not either as pictures or as symbols . . . they experience them as real, physical data: a thing as a real thing, an animal as a real animal, a man as a real man, a ghost as a real ghost. In our dreams we are in a world just as genuine and graspable as in our waking; there and here we carry out our human existence in our relations with, and in our behavior to, the things and to our fellowmen."[140]

139. "*Und das Wissen um den in je besonderer Weise verengten Weltentwurf der verschiedenen perversen Menschen erlaubt uns, zu verstehen, wieso die von der Psychoanalyse als ubiquitär erkannten Oedipus und Kastrations komplexe als wichtige Konkretisierungen und Einbruchsstellen der Daseins-Angst die Entwicklung bald einer hysterischen, bald einer 'normalen' Persönlichkeit, bald einer perversen motivieren können . . .*" (Boss).

140. "*die Traumerscheinungen . . . weder als Bilder noch als Sinnbilder wahrnehmen. Sie erfahren sie vielmehr träumend als wirkliche, physische Gegebenheiten: ein Ding als ein wirkliches Ding, ein Tier als ein wirkliches Tier, einen Menschen als einen wirklichen Menschen, ein Gespenst als ein wirkliches Gespenst. Wir sind in unseren Träumen in einer ebenso echten, handgreiflichen Welt wie in unserem Wachen und tragen dort wie hier unser Dasein in unseren Beziehungen und in unserem Verhalten zu den Dingen und Mitmenschen aus*" (Boss).

A 34-year-old woman, in psychoanalysis for three years, dreamed: She was jailed in a cell; there were many clocks; a burglar came and destroyed them, but they continued ticking. "The ticking warned me that second after second passed, but real time stood still."[141] She noticed that outside time went on because she became wrinkled. An attendant brought a big green bottle which had the shape of a man and smelled wonderfully. Then the bottle became a man who led her to the wedding. "Now I was really living again, and the hands of the clock no longer stood still."[142] As a young girl of strong sensuality, this woman had been abused by a man. She had run back to her parents to stay under their protection: For her, time no longer progressed. The discrepancy between the unmoving temporalization of her existence and the continuing world time, made her feel eerie. Boss interprets this discrepancy as the one "between her childish being-in-the-world and the superficial relations in which she is posing in the world of the grown-ups."[143] In psychoanalysis, she learned to let her erotic relations ripen. She found the way to the other sex, could marry in dream and in waking. The temporalization of her own existence had begun again.

Another of Boss' dreamers was a woman who was a successful physician. She had "hidden her female possibilities . . . behind the façade of masculine-aggressive behavior."[144] She went through psychoanalytic treatment. She dreamed of a great journey, living through half a life within half an hour, finding the man whom she could love and with whom she lived happily for years in her dream. "This dream was possible only, because now the horizon of expectation reached so far into her future. Her inner temporalization, her history, her existential openness, which she lives and

141. "'*Das Ticken mahnte mich daran, dass doch noch Sekunde nach Sekunde verrann, aber die wirkliche Zeit stand still*'" (The patient's remark).

142. "'*Ich lebte jetzt auch wirklich wieder. Und die Zeiger der Uhren standen nicht mehr still*'" (The patient's remark).

143. "*zwischen ihrem eigentlichen in der Kindlichkeit verharrenden In-der-Welt-Sein und den oberflächlichen Beziehungen, in denen sie noch notdürftig in der Welt der Erwachsenen mitmacht*" (Boss).

144. *Sie hatte* "*ihre weiblichen Moeglichkeiten . . . hinter einer Fassade des rein männlich-aggressiven Verhaltens . . . verborgen gehalten*" (Boss).

is authentically, unfolded in this dream in such far-reaching a manner."[145]

"Regardless as to whether he is waking or dreaming (the human individual) . . . is concerned in his relations to things and men, he authentically is, exists, as being related to them. This relation to his world we saw comparable to the relation of a light to those who stand in its shining . . . dreaming or waking the human individual can carry out his existence in very different kinds of behavior and relations."[146] Boss is of the opinion that we become aware of the historical continuity of our waking life through the discontinuity of our dreams.

A few examples may be added from Boss' *Psychosomatic Medicine*. These patients, like those already reported on, were in psychoanalytic therapy with him, mostly for years. A "perfect lady of the world, an irreproachable housewife, wife and mother"[147] had grown up in a conventional, rigid family, where she had been tutored by governesses. She was a lively person, but all around her was spiritual narrowness. She became perfectionistic and compulsive; finally she played the great lady while she was actually still the helpless little girl. At the age of 43, "grave neuritides . . . [with] almost untolerable pains . . . [and] a high degree of muscle weakness"[148] developed; for weeks and months she was bedridden. She reported dreams in which she underwent heavy and painful accidents, and another dream in which, as a little girl, she comprehended "her own life-long captivity within the narrow and meager mentality of her ascetic and convention-

145. "*Darum war dieser Traum nur möglich, weil jetzt der Erwartungshorizont so weit in die Zukunft hineinreichte. Ihre innere Zeitlichkeit, ihre Geschichte, ihre existentielle Offenheit, die sie eigentlich lebt und ist, war es, die sich in diesem Traum in so weitreichendem Sinn erschlossen hatte*" (Boss).

146. "*. . . träumend nicht minder, als wenn er wacht (der Mensch) . . . im Bezughaben zu den Dingen und Menschen aufgeht, als Bezogensein auf sie eigentlich ist. Diese seine Weltbezogenheit aber sahen wir dem Verhältnis eines Lichtes zu dem in seinem Scheinen Stehenden gleichen . . . dass der Mensch träumend ebenso wie wachend in sehr verschiedenen Arten von Verhaltungsweisen und Weltbezügen seine Existenz austragen kann*" (Boss) see page 417.

147. "*eine perfecte Dame von Welt, eine untadelige Hausfrau, Gattin und Mutter*" (Boss).

148. "*schwere Nervenentzündungen . . . [mit] fast unerträglichen Schmerzen . . . [und] eine hochgradige Muskelschwäche*" (Boss).

ally rigid family and of her thin governesses."[149] Although she soon became more active than before, "the pains and the weakness in her extremities disappeared after existential widening and unburdening. The severely pathological changes in tendon reflexes and the electrical excitabilities of the nerves returned to normal as soon as she had renounced enough of her attitude as a conventional lady, which was not in harmony with her real nature."[150] The former complaints recurred "with the certainty of an experiment . . . as soon as she fell back into her old mentality, a little, even if there had not yet been the slightest change in her behavior."[151] Boss deems it possible "that occasionally even such polyneuritides which can be recognized neurologically as 'organic' with all their manifestations of weakness and pains are nothing else but the somatizing of an inadequate relation to life which can be influenced psychotherapeutically."[152]

Boss has a good deal to say about accident-prone people, who "always have accidents whenever they get into serious conflict situations that they do not see any way to settle through impulsive breaking of tense interhuman relationships or through running away from too tense social situations."[153] Boss conjectures that "people often break their inner bodily relationships, their own

149. *"ihre eigene lebenslängliche Gefangenschaft innerhalb der engen und kargen Mentalität ihrer asketischen und konventionell erstarrten Familie und ihrer dürren Erzieherinnen"* (Boss).

150. *"verschwanden nach der existentiellen Weitung und Entlastung. Auch die zuvor schwer pathologisch veränderten Sehnenreflexe und elektrischen Erregbarkeiten der Nerven kehrten zur Norm zurück, sobald sie sich von der ihrem eigentlichen Wesen so ungemässen Lebenshaltung einer konventionellen Dame genügend losgesagt hatte"* (Boss).

151. *"mit der Sicherheit eines Experiments . . . , sobald sie geistig auch nur ein wenig in die alte Mentalität zurückfiel, selbst wenn sich dabei in ihrem äusseren Verhalten noch nicht das geringste geändert hatte"* (Boss).

152. *"unter Umständen selbst derartige mit neurologischer Sicherheit als 'organisch' zu erkennende Polyneuriden samt all ihren Schwäche und Schmerzerscheinungen gelegentlich nichts anderes als die Leiblichung eines inadäquaten, psychotherapeutisch beeinflussbaren Lebensbezuges sein [könnten]"* (Boss).

153. *"[sie] verunglücken immer dann, wenn sie wieder einmal in eine schwere Konfliktsituation hineingeraten sind, aber keinen Weg sehen, sie durch impulsives Brechen der konflikthaft gespannten Situation oder durch ein Ausreissen aus einer allzu gespannten Lage erledigen zu können"* (Boss).

connecting and supporting tissues, instead of breaking relationships in the world in which they live."[154]

A patient, R.U., was highly intelligent, although "as a whole human being she had remained a very infantile creature."[155] She was attached to her mother and flirted around, "just in the manner a young cat deals with other young cats."[156] One day "a young man broke into her world as a male and shook her world."[157] She made a date with him in a winter spa where she became exceedingly tense, "almost exploding."[158] She passed some of her time on her skis. Her friend found her in the hospital with a complicated fracture of a leg. Later she married and had a child. She still was dependent on her mother in whose home she lived. She went into psychoanalysis. She made up her mind to move with her husband and child into quarters of her own. After a dream that showed her dependence, she decided to do something about it and "immediately squeezed her right forearm into the door so badly that the torn muscles and tendons frustrated her good intentions for quite some time."[159]

Boss reflects that there are people who exist in situations no less tense than those of accident-prone individuals; however they do not try to break out of the conflict-situations nor do they break tendons and bones, but proceed cautiously. Some of them remain in tension throughout their lives; they have to pull themselves together without any respite and cannot but develop high blood pressure. "Ultimately they wall themselves in secretively while they are still alive, as though they wanted to make certain that their particular world relations would remain fixed in the media of their bodies. If this process has developed far enough, we are faced with people petrified through the calcification of

154. "*[Dabei] zerbrechen diese Menschen oft genug an Stelle ihrer mitweltlichen ihre innerleiblichen Verbindungen, ihre eigenleiblichen Binde und Stützgewebe*" (Boss).

155. "*Als ganzer Mensch jedoch war sie ein hochgradig infantiles Wesen geblieben*" (Boss).

156. "*so, wie eine ganz junge Katze mit ihresgleichen umzugehen pflegt*" (Boss).

157. "*ein junger Mann als Mann in ihre Welt einbrach und diese Welt erschütterte*" (Boss).

158. "*zum Zerreissen gespannt*" (Boss quotes the patient here).

159. "*Da klemmte sie aber auch schon ihren rechten Unterarm so schwer in die Türe ein, dass die Muskel-und Sehnenzerreissungen die Ausführung aller ihrer guten Absichten für geraume Zeit vereitelten*" (Boss).

their arterioles, i.e., the petrified sequela of preceding essential or idiopathic hypertension."[160] The association of calcification and walling in is unmistakable; so is the verve of the discourse.

It is apparent that Boss, like the rest of us, is using a variety of nouns when he speaks about patients. In the case just mentioned, there are *"diese Menschen," "als ganzer Mensch," "ein infantiles Wesen."* With whatever interpretation one wishes to clarify and to understand what these people are doing, one is faced with them as *"ganze Menschen";* not merely as *"Dasein,"* a word which Boss, like Heidegger, uses synonymously with existence. It impresses one, not rarely, as an ingenious performance when interpretations which are obviously shaped in the writer's mind according to the pattern of Heidegger's thought seem to be taken as reality and as originating with the patient. Although once in a while Boss' writing not only sounds—but is —fantastic, there is something appealing in it which is missed in Binswanger's, and still more in Kuhn's, publications. The writer cannot help assuming that this is due to several factors, among which Boss' sense of humor and his undeniable, if often hidden, common sense are as relevant as his style and his convert's fervor.

IX

Roland Kuhn is the third and last representative of existential analysis about whom the writer wishes to report here. Although, so far, his productions do not approach those of Binswanger and Boss—he is considerably younger—he has already written a goodly number of papers. One may best consider him as a devoted son-pupil of Binswanger and an adoring grandson-pupil of Heidegger. His writings do not seem to be easily produced; they are not entertaining to read. Despite all his courtesy, once in a while he seems to be unable—or unwilling?—to suppress a certain hostility against non-adherents to his creed. The "it is so" of the psychiatric existential analysts is very outspoken in Kuhn. He knows as well as anyone that his existential-analytical excursions, discourses and discussions are interpretations;

160. *"Schliesslich mauern sie sich insgeheim lebendigen Leibes ein, gleichsam um das Steckenbleiben ihres so gestimmten Weltverhältnisses im Medium der Leiblichkeit zu sichern. Ist dieser Prozess einmal weit genug gediehen, dann haben wir den an Arteriolenverkalkung versteinerten Menschen vor uns, den petrifizierten Folgezustand einer vorgängigen essentiellen oder idiopathischen Hypertonie"* (Boss).

yet he is so sure of them that he cannot but consider them as certain—at least more certain than anything that may be deemed to be facts or interpretations by any other school of thought.

In a paper in which Kuhn discusses transference from the existential analytical point of view, particular attention is paid to the interruption of communications, in order to show that new relations will follow the interruptions. These interruptions are said to give the therapist a particular chance "to an encounter with himself."[161] Kuhn emphasizes that the existential-analytical therapist must be sure of himself. Like Binswanger and Boss, he realizes that not every individual is accessible to, and apt to go through a deeper reaching psychotherapy; he writes "In psychotherapy, the attempt is made to extricate the patient from the bane of his past. To the degree to which this attempt succeeds, the patient becomes free, open to the new, and able to unfold his creative faculties . . ."[162] This is, one conjectures, likely to reduce the number of candidates for such therapy to a rather modest figure.

Among other papers on patients, Kuhn published a rather extensive one on a man who, at the age of 20, shot a prostitute. Rudolf, born in 1918, had some schizophrenic, depressive and epileptic heredity. He early lost his mother (1922) whose shining eyes he never forgot, and whose dead body he saw, as he later saw the dead body of his father (1939). He seemed to go through a violent affect of mourning when the father's body was taken away. The father died (January 17 or 18, 1939), several weeks after Rudolf had had an argument with him (Christmas 1938). On March 23, 1939, Rudolf had unsatisfactory intercourse with a prostitute whom he shot after she had put on her clothes. The wound was slight. He went to the police soon afterward. As a schizoid-hysterical psychopath who had acted in a neurotic state, he was committed to a mental hospital where he remained until 1948. During these nine years, he "had to undergo a very thorough psycho-analytic examination, observation and treatment."[163]

161. *"zu einer Begegnung mit sich selbst"* (Kuhn).

162. *"In dem Masse, als es der Psychotherapie gelingt, dem Kranken dazu zu verhelfen, sich von dem Bann seiner Vergangenheit zu lösen, wird er frei, dem Neuen offen und er kann seine schöpferischen Fähigkeiten entfalten"* (Kuhn).

163. This quotation is taken literally from the English summary of Kuhn's paper.

Rudolf was always a daydreamer. Working as a butcher's apprentice he had occasionally had intercourse with hogs that he afterward killed; he also had intercourse with his master's wife whereupon he was discharged. He continued his apprenticeship with another butcher. He had a variety of heterosexual relations. Kuhn found that Rudolf was sexually perverted (fetishistic, sodomistic, sadistic, with passive homosexual trends); that he was compulsive; and that he had shot the prostitute in a psychotic depression with schizoid trends.

Half of this paper consists of Kuhn's "attempt to understand Rudolf's act existential-analytically."[164] Some of his statements and explanations are reported. He writes, "The act was committed in cold blood during the depression that followed the sexual discharge; it was not performed in order to gain highest sexual or other excitation."[165] Kuhn conjectures that the act "originated from genuine compulsive experiencing"[166] but was "not a compulsive action."[167] He explains that Rudolf's *Dasein* rolled off horizontally on the street which is full of thrills. "The life in thrills is basic for this world project of Rudolf's . . . Where there is no thrill, there is for him no world, there is nothing at all, emptiness, coldness, senselessness, and boredom."[168] Kuhn tells us: "The thrilling form of human existence has its own laws; they are, as far as we see, insufficiently investigated in psychology and psychiatry. However, the science of literature has recognized the thrilling style of life in dealing with the dramatic problem in art and life."[169]

In Rudolf's dreams and reveries, Kuhn found ample material

164. "*Versuch, Rudolfs Tat daseinsanalytisch zu verstehen*" (Kuhn).

165. "*Die Tat wurde nicht zur Gewinnung höchster sexueller oder auch sonstiger Erregung ausgeführt sondern kaltblütig in der sexuellen Entladung nachfolgenden Verstimmung*" (Kuhn).

166. "*aus echtem Zwangserleben . . . entstanden*" (Kuhn).

167. "*keine Zwangshandlung*" (Kuhn).

168. "*Das Leben in der Spannung liegt diesem Weltentwurf Rudolfs zugrunde . . . Wo keine Spannung ist, da ist für ihn auch keine Welt, da ist überhaupt nichts, Leere, Kälte, Sinnlosigkeit und Langeweile*" (Kuhn).

169. "*Die spannende Daseinsform hat ihre eigenen Gesetze; diese sind in Psychologie und Psychiatrie, soweit wir sehen, nur ungenügend untersucht; dagegen hat sich die Literaturwissenschaft seit langem durch die Beschäftigung mit dem Problem des Dramatischen in Kunst und Leben mit dem spannenden Lebensstil auseinandergesetzt*" (Kuhn).

to make out that there was a "vertical axis in Rudolf's existence,[170] too." Kuhn goes into many details about the "subterranean nature of the cellar,"[171] of "this rotting world," as contrasted by the "shining world of the street."[172] To the subterranean, also belongs the interior of the body. Kuhn reasons that necrophobic and necrophilic features must be assumed in Rudolf's attitude toward dead bodies; that the "necrophilic features belong to the world of active life."[173] "The necrophobia must be related to a nocturnal existence, as we know that Rudolf is afraid of corpses only at nighttime."[174] Among the depositions Rudolf made soon after the shooting were remarks on his wish "to avenge himself on prostitutes . . . to appear a hero in the war against prostitution . . . to avoid the temptations of the world and continue his life in the isolation of a penitentiary cell . . ."[175] Kuhn points to the "tremendous influence which Shakespeare's dramas had on Rudolf during the therapy . . . In the dramas, he sees something that reaches beyond the mere human being, namely the action of men, the decisive deed with which they take their destiny into their own hands. . ."[176] One wonders whether in Kuhn's view, the hero is seen as part of the shining world, reaching "beyond . . . ," presumably in Kuhn's or rather Rudolf's, vertical axis of existence. At any rate, Kuhn appears to draw two lines: the necrophobic-features-and-nocturnal existence-world of the cellar, of fantasies and dreams—versus the necrophilia-shining-existence-world of active life, of everyday life. He adds warily: "With certain reservations, we may designate the two worlds as Rudolf's past and

170. *"vertikale Daseinsachse"* (Kuhn).

171. *"die verwesende Welt des Kellers"* (Kuhn).

172. *"die glänzende Welt der Strasse"* (Kuhn).

173. *"die nekrophilen Züge gehören zur Welt des tätigen Lebens"* (Kuhn).

174. *"Die Nekrophobie . . . muss mit einem nächtlichen Dasein in Zusammenhand stehen, da wir von Rudolf wissen, dass er die Leichen nur nachts fürchtete"* (Kuhn).

175. *". . . sich an den Dirnen rächen . . . als ein Held erscheinen, der den Kampf gegen die Prostitution wagt . . . den Versuchungen der Welt aus dem Wege gehen und in der Abgeschiedenheit der Zuchtauszelle weiterleben"* (Kuhn).

176. *"des gewaltigen Einflusses . . . , den Shakespeares Dramen auf Rudolf während der Behandlung ausübten . . . In den Dramen sieht er etwas, über den blossen Menschen hinausgeht, und zwar die Handlung der Menschen, die entscheidende Tat, mit der sie ihr Schicksal selbst in die Hand nehmen . . ."* (Kuhn).

future."[177] Kuhn believes that the two world-projects interact very dynamically, and that, hence, there are connections between Rudolf's mourning after his father's death and the shooting: "In Rudolf's affect of mourning, there are the living women who have sexual needs and are seductive; they become a burden to Rudolf, and he gets rid of them in his act. Afterward he is free and hungry like the normally-mourning person is if, after the burial, he can again get hold of reality."[178]

Kuhn contrasts Rudolf with Binswanger's Ellen West[179] and writes referring to Binswanger's considerations:[180] "In one case action, in the other rigidity. Are we perhaps standing here at the point where the problems of the manic-depressive psychosis with its antinomic structure and the problems of schizophrenia as a destructive process are facing, touching and crossing each other with the result that the existential-analytical examination flows back into the clinical field?"[181] From the clinical viewpoint, it is quite improbable that Rudolf ever had a manic-depressive psychosis and/or belonged to the cyclothymic group in the narrower, or even broader, sense.

Kuhn's case has been presented at some length, as the writer presumes that his method and its shortcomings become visible step by step. One is often impressed with the tendency to complicate matters which in all likelihood are not so complicated at all, and with the tendency to use a flood of words where a few words would be more telling. Who thought and who experienced this or that—the intuiting doctor or the patient under treatment—is often not discernible. One cannot be sure where the doctor's

177. *"Mit gewissen Vorbehalten dürfen wir wohl die beiden Welten als Rudolfs Vergangenheit und Zukunft bezeichnen"* (Kuhn).

178. *"Im Traueraffekt Rudolfs sind es die lebenden, geschlechtlichen Anspruch stellenden verführeden Frauen, die Rudolf zur Last werden und deren er sich in seiner Tat entledigt. Er ist nachher befreit und empfindet Hunger, wie der normal Trauernde nach der Beerdigung, wenn er sich der Wirklichkeit wieder bemächtigen kann"* (Kuhn).

179. See pages 224-225 (April 1957 QUARTERLY).

180. See pages 221-222 (April 1957 QUARTERLY).

181. *"Im einen Fall Handlung, im andern Erstarrung. Stehen wir hier vielleicht an jener Stelle, wo die Problematik des manisch-depressiven Irreseins mit seiner antinomischen Struktur und diejenige der Schizophrenie mit ihrer prozesshaften Destruktion sich gegenüberstehen, berühren and überschneiden, so dass daseinsanalytische Untersuchung wieder in die klinischen Bereiche mündet?"* (Kuhn).

influence ends and where Shakespeare's influence begins, the less so as the reader does not know who discusses what in the conversations between Dr. Kuhn and his patient about Shakespeare. Even the author's erudition and his exploitation of other fields of knowledge which serve his purpose, cannot conceal the fact that this is not so much an existential analysis of the case of Rudolf as a free-wheeling interpretation of it by Dr. Kuhn who, like his colleagues, follows his *"Einfällen,"* his intuition.

Kuhn believes that his case could not be clarified so far as he went with any other method. Kuhn emphasizes that the therapist finds starting points from the "knowledge of the structure of human existence,"[182] he then can lead the conversation and awaken the patient's interest. With all or despite all the emphasis on human existence and its structure, it is always inevitably the patient, a human being in his particular situation, with whom the physician, existential analyst or not, conducts the conversation. Could one expect that a therapist working with a certain method of interpretation, for which he has prepared himself enthusiastically, and which has become a Faith, a *"Glaubenshaltung,"*[183] for him, would not pay tribute to this very method in awakening the interest of the patient and in conducting the conversation? Why should it be so extremely difficult to appreciate and to admit that in such and similar situations, one is likely to find what one is seeking? Kuhn makes an appropriate observation "Let us not underestimate habit."[184]

X

Whatever contemporary and future philosophers will think about Heidegger's work, there is little doubt about his ability to say what he has to say in powerful language. While his dealings with the German language are at times outright painful, one should not forget that he strove to express his ideas in a vocabulary never used before. Löwith observed: "Often one cannot determine whether Heidegger composes poems as a thinker or whether he thinks as a poet, since he condenses an associatively

182. *"Kenntnis der Daseinsstruktur"* (Kuhn).

183. See page 418.

184. *"Hüten wir uns, die Gewohnheit zu achten"* (Kuhn).

loosened thinking very considerably."[185] Heidegger complained that no one understood him. Occasionally a most receptive philosopher seems to wonder about the "sphinx Heidegger."[186]

The present writer hardly needs to say that he is no philosopher. He has worked hard to come to some understanding of Heidegger. He is not "overwhelmed," as Binswanger confessed to being.[187] The writer did not fall prey to the magic of Heidegger's language. However, he is captivated by several of his ideas, for example the trinity of time, the being-thrown-into-the-world. These and several other ideas of Heidegger can be useful in psychopathology, without necessarily reconstructing psychopathology and clinical psychiatry on the basis of Heidegger's system.

Binswanger discovered Heidegger for psychiatry. He ought to have full credit in this respect. The present writer realizes and acknowledges the great stimulation psychopathology has received from Binswanger's effort. Binswanger accepted the new teaching and immediately set to work to communicate his fascination to other psychiatrists. However, he felt chilly when he was faced with Heidegger's existential experience, with the cold nothingness and what not; hence he added love to the picture total. The writer conjectures that he persuaded himself this would provide the human warmth he missed in *Sein und Zeit*.

Binswanger stressed the difference between Heidegger's existential analy*tics* and its purpose and existential analy*sis* and its purpose, as he, Binswanger, proceeded to describe, to circumscribe and, in a sense, to create it. He stressed the difference as he saw it. He realized that Heidegger's teaching concerned ontology while he, Binswanger, wanted to move toward anthropology. With all his use of the phenomenological method, as he adapted it to his needs, Binswanger remained under the shadow of his teacher Heidegger. Unafraid of writing and expounding most volubly, he did not come to any particular clarification of Heidegger's thought, nor was he much happier in re-

185. "*Es ist oft nicht zu entscheiden, ob Heidegger denkerisch dichtet oder dichterisch denkt, so sehr verdichtet er ein assoziativ gelockertes Denken*" (Löwith).

186. From a letter written by Peter Wust and printed in Heinemann's "*Existenzphilosophie—lebendig oder tot?*"

187. "*unter dem überwältigenden Eindruck von 'Sein und Zeit'. . .*" (Binswanger).

spect to his own derivations, in which he often followed his intuition in an enviably arbitrary manner.

On the one side, Binswanger was anxious to show that his existential-analytical writings were no psychopathology, but aimed in the direction of Heidegger's analyses of human existence, which he, Binswanger, considered basic to biological, psychological and psychopathological data and interpretations. On the other side—old psychopathologist and psychoanalyst that he was—he could not abandon Freudian teachings. Again and again, he pointed out that his existential-analytic expositions and explanations as well as his existential understanding, were entirely different from explanations and understanding as practised in psychology and psychopathology. Nevertheless, even when he applied existential analy*sis* he frequently dealt with and interpreted experiences in a psychological or psychopathological manner. It seems to me that Szilasi, a philosopher and one of Heidegger's students, strikingly and briefly expressed what I have been trying to present in so many words; Szilasi says that Binswanger dwells "in his own intermediate territory between psychoanalysis and existential analysis."[188]

Heidegger, the philosopher, has no psychological ambitions. Binswanger, the psychiatrist, psychopathologist and psychoanalyst, has definite philosophical ambitions. It has been known for quite some time that psychiatry cannot do all that it will have to do ultimately, without some philosophical understanding and without the insight that not everything can be dissolved in biological formulae. Jaspers' work is not forgotten. Natural scientists, physicists and others are rather philosophically minded nowadays. This does, however, not legitimatize the attempt to build up psychiatry on a philosophical credo—on a philosophical credo from which Binswanger derived an "empirical" tool which *is not*, but is said to be existential-analy*tics* and which *is*, but is said *not* to be psychopathology.

It is appropriate to observe here that the phenomenological material was only partly derived from phenomena the patients allowed to appear; much of it was not originally found in the consciousness of the patients but owed its appearance to the

188. *"dass sich Binswanger in einem eigenen Zwischenterritorium zwischen der Psychoanalyse und der Existentialanalyse befindet"* (Szilasi, quoted from Spörri).

intuition of the existential analyst regardless of what Binswanger considered the "fundamental principle of the phenomenological method: the restriction of the analysis to what can really be found in consciousness . . ."[189] Does the existential analyst after all analyze his own experiences in his dialogue with his patient?[190]

Heidegger formulated clearly: "Phenomenology of human existence is hermeneutics in the original meaning of the word in which it designates the business of interpretation."[191] Although Binswanger wishes to comprehend mankind,[192] he is dealing with human individuals, and his analyses of these individuals are, despite his use of Heidegger's terms, psychopathology. Binswanger is searching sense, meaning in everything, but he wrote himself: "'Sense and significance' have sense and significance only for the individuality, i.e. for this definite I and his world. Everything else is abstract theory."[193] "Sense and significance" can be squeezed into and out of human behavior and experiencing. The fact that this can be done in such a variety of ways ought to warn every interpreter not to consider his method and his interpretations the sole truth. Scholars who have learned about possibilities in Heidegger's school ought to think of their interpretations as possibilities.

Binswanger first made the attempt to derive from Heidegger's existential analy*tics* a method of interpretation on the presupposition of a "certain a priori structure of existence,"[194] later he came to see in this method, his existential analy*sis*, therapeutic potentialities which he and Kuhn tried to make practically usable. The cases they published were, as far as they were ac-

189. "*. . . **Grundprinzip der phänomenologischen Methode: die Berschränkung der Analyse auf das im Bewusstsein wirklich Vorfindbare** . . .*" (Binswanger).

190. Kuhn has made remarks on this dialogue in his paper "Man in the Dialogue of the Patient with his Physician, and the Problem of Transference." (*Der Mensch in der Zwiesprache des Kranken mit seinem Arzt und das Problem der Übertragung*) See page 428.

191. *Phänomenologie des Daseins ist Hermeneutik in der ursprünglichen Bedeutung des Wortes, wonach es das Geschäft des Auslegens bezeichnet* (Heidegger).

192. See page 217 (April 1957 QUARTERLY).

193. "*'Sinn und Bedeutung' haben Sinn und Bedeutung überhaupt nur für die **Individualität, d.h. für dieses bestimmte Ich und seine Welt. Alles Weitere ist abstrakte Theorie**"* (Binswanger).

194. "*eine gewisse apriorische **Struktur des Daseins***" (Binswanger).

cessible to the present writer, psychoanalyzed, and afterward interpreted existential-analytically. Kuhn's Rudolf is a particularly impressive example. Kuhn writes about him: "He felt as if newly born, declared that he had discovered the beauties of the world little by little and had just learned to know human beings."[195] It would be easy to ask a number of questions about this sentence, especially about the world, i.e. about the meaning the word "world" has in it. This question might be the more justified as the sentence is found 20 printed pages before Kuhn begins to report the attempt to understand Rudolf's act existential-analytically. In this, as may be read in the foregoing, Rudolf's world is looked at horizontally and vertically and interpreted accordingly.[196]

Boss declines to make any practical application of existential analy*tics;* he accepted Heidegger's philosophy as his metaphysics of *Weltanschauung.*[197] It is unmistakable that here, in Heidegger's work, he found and founded his Faith, his *Glaubenshaltung.* In his writings, it is obvious that he is not a one-sided psychoanalyst but knows how to adjust his therapeutic procedure to the individual patient and his problems. To the present writer, Boss appears to be a genuine psychotherapist. His familiarity with Heidegger's work is complete, and his devotion to it is perfect. Boss tries to convey an "existential-analytical understanding of human being-sick."[198] It is impossible to argue with him as to whether and how far he keeps existential analy*tics* out of therapeutic practice. There is no doubt, though, that his thinking has been shaped thoroughly in the school of Heidegger, whose ideas he has assimilated and whose vocabulary he masters to perfection.

If one has once become used to Boss' style, it is relatively easy to understand what he means, but also to see where he forgets something important: the circumstances that his method

195. *"Er fühlte sich wie neu geboren, behauptete, nun erst nach und nach die Schönheiten der Welt zu entdecken und die Menschen kennen zu lernen"* (Kuhn).

196. See pages 429-430.

197. See page 418.

198. *"existential-analytisches Verstehen menschlichen Krankseins"* (Boss). The present writer realizes that "human being-sick" sounds rather clumsy. However, in this being-sick, the notion of *Dasein* is obviously implied. It is not sickness, *Krankheit,* that the existential-analytical psychiatrists seek to deal with, but the change of human existence, *Dasein,* through sickness.

of elucidation and understanding does not produce "facts," but is bound to move within the realm of interpretation. If one—like the present writer—has never adhered to psychoanalysis, it is particularly interesting to read that for Boss, who is still practising psychoanalysis, "the psychoanalytical dynamisms and mechanisms are 'assumed' . . . nothing but products of thinking attributed to the given reality."[199] He seems to overlook that what he is doing and finding now is just as much based on assumptions and that what he now attributes to the "given reality" represents "products of thinking," too.

From his *Glaubenshaltung,* Boss admonishes physicians to remember that they are "descendants of ancient priest-physicians."[200] He asks the rhetorical question, "Did not a division of the healers of mankind into priests and physicians then occur, the priests wanting to bring man only salvation, the physicians wanting to bring him nothing but healing?"[201] One cannot but admire such eloquence, but one will wonder whether a physician, a psychotherapist of the experience and perspicacity of Boss, would forget that there is here made an implication as regards the miracle being the dearest child of Faith. Soberly expressed in its application to medicine: If the physician is devoted to his faith and is practising this faith in his work, his patients will fall in line and share his faith. This is the secret of the genuine psychotherapist. He is able to transfer his faith to his patient. It does not matter what this faith is. What matters is the doctor.

Many great physicians have taught us that we are always faced with the patient as a whole human being. One of Boss' pertinent remarks reads: "From the simplest technical-surgical procedures and operations to the technique of psychoanalysis, the whole thinking and acting of the physician ought to be concerned with the desire to open to our patients the way to their

199. See page 418.

200. *"Nachfahren uralter Priester-Ärzte"* (Boss).

201. *"Spalteten sich dann jedoch nicht die Heiler der Menschheit in Priester, die dem Menschen nur noch das Heil, und in Ärzte, die ihnen lediglich Heilung bringen wollten?"* (Boss). In the German original, there is some play with the words *Heiler* (healer), *Heil* (salvation) and *Heilung* (healing).

being fully human."[202] This sounds as admirable and rhetorical as the question just quoted. Boss knows that there is more than one way of "healing" and more than one way of becoming "fully human."

Heidegger taught, "If there is no human existence, there is no world either."[203] He later taught about human *ek*-sistence concerning which Boss formulated: "Man ek-sists in the most literal meaning of this word. He is always outside, meeting with the things, animals and human beings of the world."[204] As far as I understand, man is the only existent capable of ek-sistence. This ek-sistence is said to open the world for him and to keep it open. Even without going into details, it may be permissible to say that the use of both these notions—existence and ek-sistence—facilitates interpretations for the existential-analytically minded psychiatrist; but it is not clear, for instance, in which relation the "human existence that is no longer by itself" stands to ek-sistence. It may not always have been easy for the psychiatrists to keep step with Heidegger's thought. Needless to state that his and theirs is the right to change theories. The doctors have discarded Freudian theory, but remained faithful to psychoanalytical technique. What will happen to their adherence to Heideggerian theory and its use in their interpretations remains to be seen.

What worries the writer is the notion of these colleagues that, with the introduction of the concept of *Dasein*, everything becomes or can be made meaningful—everything that happens to or is experienced by patients; and that every interpretation is looked at as valid which expounds this in pertinent vocabulary and shows how *Dasein* sets body and soul to work. The body-soul dualism is artificial, another theory produced by thinking. This dualism serves in psychiatry and psychopathology as an "empirical dualism," as it was called by Kurt Schneider, who

202. "*Immer bewusster sollte vielmehr das gesamte ärztliche Denken und Handeln, von den einfachsten technisch-chirurgischen Handgriffen und Eingriffen bis zur Technik der Psychoanalyse, von dem Bestreben getragen sein, unseren Kranken den Weg zu ihrem vollen Menschsein zu bahnen*" (Boss).

203. "*Wenn kein Dasein existiert, ist auch keine Welt da*" (Heidegger).

204. "*Der Mensch ek-sistiert in dieses Wortes wörtlichstem Sinne. Er ist schon immer 'draussen,' bei den ihm begegnenden Dingen, Tieren und Menschen der Welt*" (Boss) See page 213 (April 1957 QUARTERLY).

emphasized: "This does not imply an attitude toward a metaphysical interpretation of the body-soul relation."[205] Schneider's caution does not seem to interest our existential-analytical minded colleagues. They settle the problem by pre-ordaining *Dasein* to whatever may be considered physical or psychological, that is, to whatever may concern the human being's body or experiencing. With words like *"Leiblichung," "Der Leib leibt,"*[206] and so on, problems are not solved, but are only verbalized differently. Boss' understanding is through psychology or psychopathology, despite the existential-analytical *Weltanschuung.* If one is certain that everything has a meaning, one cannot fail to dig it out or to implant it wherever he needs it. However, this is no longer knowledge, but faith—for which there should be no less respect than for knowledge when it is recognized for what it is.

XI

It may seem odd that the writer is so critical of a "method," to use a short word, which, under the banner of a contemporary philosophical system, has made inroads into psychiatry. One should acknowledge gratefully that it is at least a contemporary philosophical system. The writer wants to express personal gratitude to the three colleagues from whom he has learned much. But the certainty with which they write—"no doubt," "because it is so," "of course," "naturally"—cannot conceal the fact that concepts, or even mere words, are often gaily tossed around. The ponderousness of the older, the alacrity of the younger, priest and the assiduity of the deacon, though occasionally irritating, show the manner in which each of them goes after his business. It is the writer's impression that our existential-analytic friends have overdone it philosophically": Binswanger in particular, appears in a sense, to "out-Heidegger" Heidegger. Did they try to be revolutionists? If they had such intentions they were handicapped by their own conservatism, expressed in their sticking to Freudian technique and in their prasing phenomenology no end. Karl Jaspers has the undeniable merit of introducing phenomenology into psychopathology; notwithstanding all the efforts of our three

205. *"empirischen Dualismus. Zu einer metaphysischen Auslegung des Leib-Seele-Verhältnisses ist damit nicht Stellung genommen"* (Kurt Schneider).

206. See pages 419 and 427.

existential-analyst colleagues, Jaspers' insight seems to be broader than theirs. While our friends assume that they prepared the ground upon, and the way along, which psychiatry and psychopathology will have to develop, the writer deems it likely that some of their pertinent concepts will be integrated into psychiatry and psychopathology. This will not be the first time that psychiatry and psychopathology have integrated valuable ideas and discarded certain "theories."

Heinemann has told us that Kierkegaard "was a proleptic man, who as a single individual, experienced in the middle of the last century something which has become common experience in our own day. . ."[207] The writer sees no proof that Kierkegaard's existential experience has become common nowadays. It seems to the writer that people feel themselves threatened—perhaps essentially because of information from government and press on bombs and missiles—and so suffer from fear. But even as regards fear, it would be difficult to find out whether there is relatively or absolutely more fear suffered now than during other eras. Man has always had a great ability to provide threats as sources of fear. It might be doubted whether we would have this insight clearly without Kierkegaard.

For Kierkegaard, an unhappy, gloomy man, dread and fear had particular attraction; he was living in them, he was again and again experiencing them. They belonged to the pessimistic picture of existence and world as he built it up. Heidegger's existence, eksistence and world are not joyous, but they are not consistently beclouded. It is noteworthy that Binswanger brings brighter colors into the picture which becomes ever brighter the more that existential analy*sis* (Binswanger, Kuhn) and existential analy*tics* (Boss) are brought into closer contact with people—particularly if this contact is a therapeutic one. Here, it is Boss, above all, whose optimism is unmistakable. At any rate, what began in Kierkegaard's self-analyzing torment shines through in our colleagues' happy willingness to understand and help their patients. Looking at it in this manner, one might find the matter of which name is applied to their procedures to be irrelevant.

Nevertheless, the writer is looking forward to the day when

207. See page 205 (April 1957 QUARTERLY).

our friends will say in a modification of Bollnow's observation:[208] "There is no pure existential analy*sis* or existential analy*tics;* what is called so is essentially a transition that will lead into a deepened understanding of human experiencing." No one will begrudge it to our friends that it fell to their lot to do some pioneering into a broader and profounder psychopathology.

Postscript

Since this "appraisal" was submitted for publication, Binswanger and Boss have continued to publish their works. Their most recent books appeared in 1956 and 1957 respectively. They are briefly reviewed here, in order to round out the picture.

Binswanger's *Three Patterns of Existential Failure*[209] carries the sub-title "*Verstiegenheit Verschrobenheit Manierierheit.*" It seems to the writer that "eccentricity, queerness, and stiltedness" come closest to these German words. Binswanger's "eccentric existence" gets stuck in its vertical motion with forgetfulness or insufficient awareness of there being horizontal motion, too. In the world of "queer existence," everything is queer and oblique; among other examples Binswanger describes a father who gives a coffin as a Christmas present to his carcinomatous daughter. In "stilted existence," inability to be one's (natural) self prevails; there is a "sought after, played at, and wanted" height of existence which makes existence appear unauthentic; moving behind a mask.

Binswanger emphasizes that his existential-analytic considerations are entirely different from thinking in clinical and psychopathological terms.

He sees the three existential-failure patterns as facets of one comprehensive rigidity of existence—rigid in the existential sense. Hence, he can dogmatically say that the "vicinity" of schizophrenia and these patterns is demonstrated by existential-analytical understanding. He can also claim that schizophrenic splitting, explained by Eugen Bleuler with a "theoretic-constructive hypothesis," is now understood in an existential-analytical manner. He assumes that he has succeeded "in resolving the rigid

208. See page 214 (April 1957 Quarterly).

209. Binswanger, Ludwig: *Drei Formen missglückten Daseins. Verstiegenheit Verschrobenheit Maniertheit.* Niemeyer. Tübingen. 1956.

concept of autism, as a cardinal schizophrenic symptom through its redirection into the stream of human existence and through the evidence of existential forms and changes . . . which the psychiatric clinic diagnoses as schizophrenia."[210]

What Binswanger has performed here is a tour de force from schizophrenia to schizophrenia, using his particular vocabulary against the background of Heidegger's *Being and Time.*

Boss,[211] regardless of the courtesy he shows toward Binswanger and toward Binswanger's existential-analytical pioneering, emphasizes that Binswanger has not gone beyond Heidegger's *Being and Time.* Hence Boss cannot but adjudge his colleague to be somewhat antiquated. Boss had always tried to keep pace with Heidegger's ideas and publications. Boss finds himself now in a position in which he seems to contend for the papacy in psychiatric existentialism.

Boss stands, in his most recent dissertation,[211] without reservation on the ground of Heidegger's existential analytic and later philosophical concepts, which he accepts and propagates with all the enthusiasm of the fanatically devoted pupil.

Boss is very critical of Freud's theories but finds Freud's practical method of psychoanalysis as acceptable and useful as ever. He tries to show that "Freud's psychoanalytic practice was always existential-analytical understanding . . ."[212] The "harmony of psychoanalytic practice and existential-analytic understanding"[213] is the leitmotiv of Boss' discussion.

Boss does not see, or does not want to see, that his explication is thoroughly arbitrary, according to the deplorable fact that one can read anything into and out of anything that one cares to read anything into or out of. Boss seems to ignore the fact that he is constantly interpreting. He appears to be imbued

210. *"in der Auflösung . . . des starren Begriffs des Autismus als des schizophrenen Kardinalsymptoms durch seine Rückverwandlung in den Fluss des Geschehens menschlichen Daseins und durch den Aufweis der Daseinsformen und Daseinswandlungen . . . , den die psychiatrische Klinik als Schizophrenie diagnostiziert."*

211. Boss, Medard: *Psychoanalyse und Daseinsanalytik.* Huber, Bern and Stuttgart. 1957.

212. *". . . dass die psychoanalytische Praxis Freuds schon immer daseinsanalytisches Verstehen selbst war. . ."*

213. *"Der Einklang von psychoanalytischer Praxis und daseins-analytischem Menschenverständnis."*

with the conviction that, where one talks about existence, there are facts.

It is promising that quite a few originally hard-headed psychoanalysts are changing their attitude in respect to psychoanalytic theory and practice. There will be more such changes, and there will be—as the parting of the ways of Binswanger and Boss demonstrates—change over change in psychiatric existential analytics. One may hope that the exaggerated feeling of importance, the uncritical fanaticism, the dogmatic pomposity of the discussion will give way to the common sense which is indispensable for the understanding of people and people's experiencing. In this book of Boss, much more is said about the patients—about human beings—than in his previous publications. The writer dares suppose that Boss always treats people, never "existences." And Boss is able to forgive Freud "his unwitting philosophical impedimenta."[214]

But, even so, Boss appears to feel that whatever Heidegger says is the last word concerning existence and related and unrelated problems. One may be glad to leave the pertinent discussion to the philosophers.

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214. "*seine unwissentlichen philosophischen Behinderungen.*"

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RAUWOLFIA SERPENTINA IN THE CONTROL OF ANXIETY*

BY PAUL LOWINGER, M.D.

There is an extensive literature on the clinical applications of Rauwolfia serpentina. Although the Rauwolfia serpentina root has been known as a drug for centuries, the first modern medical study appeared in the Indian literature in 1931.[1] A European publication did not appear until 1949,[2] and the first evaluation in the United States occurred in 1952.[3] Many recent studies[4-10] have shown its usefulness in psychiatric patients for a wide variety of symptoms and illnesses. Some investigations of the value of Rauwolfia in ambulatory psychiatric patients have appeared.[11, 12]

The present study is a clinical evaluation of the usefulness of Rauwolfia serpentina in the control of a single key symptom, overt anxiety, in ambulatory patients with a variety of psychiatric conditions. The method compared a group of patients treated with the Rauwolfia serpentina drugs to a control group of patients who were treated with other drugs or without medication. Three Rauwolfia drugs were used and compared with each other as to clinical effectiveness: reserpine, a single pure alkaloid; the whole root; and alseroxylon, a mixture of alkaloids free from non-alkaloidal matter.

The patients were merchant seamen, coast guardsmen and others eligible for treatment at the United States Public Health Service Hospital, New Orleans, which has a 24-bed psychiatric open ward and an outpatient service. Most of the patients were males between the ages of 20 and 45.

The Rauwolfia and control groups were closely comparable with respect to age, occupation, sex, socio-economic status, race, and diagnosis, as well as to the duration and severity of anxiety. A partial comparison of the two groups is shown in Table 1.

The subjects were all psychiatric open ward patients and out-

*From the Lafayette Clinic and Wayne State University College of Medicine, Detroit. The reserpine (Serpasil) was supplied by Ciba Pharmaceutical Products, Inc., Summit, N.J.; the alseroxylon (Rauwiloid) was from Riker Laboratories, Inc., Los Angeles; the whole root (Raudixin) was furnished by the Squibb Institute for Medical Research, New Brunswick, N.J. Acknowledgment is made to James L. Baker, M.D., for his clinical collaboration in this study which was done at the U. S. Public Health Service Hospital, New Orleans. The paper was completed in 1955.

Table 1. Comparison of Rauwolfia-Patient and Control-Patient Groups.

	Rauwolfia Patients		Control Patients	
	No.	Per cent	No.	Per cent
Total cases	70	100	43	100
Psychoneurotic disorders	30	43	21	49
Schizophrenic reactions	21	30	9	21
Personality disorders	16	23	12	28
Other psychiatric diagnoses	3	4	1	2
Severity of anxiety symptoms:				
Mild or moderate	26	37	16	38
Causing considerable disturbance of personality functioning	27	39	19	43
Of psychotic proportions	17	24	8	19
Duration of anxiety over one year	16	23	17	40
Duration one year and less	54	77	26	60
Drugs used in treatment	70	100	29	67
No drugs used	0	0	14	33
No change or slight decrease of anxiety	15	21	9	21
Moderate decrease or complete remission of anxiety	55	79	34	79
No toxicity due to medication	42	60	43	100
Some toxicity due to medication	28	40	0	0

patients with overt anxiety in the somatic and psychic spheres, i.e., generalized tension, smooth and skeletal muscle spasm, fatigue, poor attention, indecision, etc. Ratings of severity of anxiety were considered apart from the severity of the psychiatric illness. For example, a patient with an emotionally unstable personality had anxiety in terms of tremulousness, some confusion in perception, reduced work efficiency and fears, while other more highly symbolized non-anxiety symptoms of his psychiatric illness included sexual perversion, outbursts of anger, litigiousness and the use of alcohol to excess. The severity of anxiety was rated in the three groups mentioned in Table 1 and 2. *Mild or moderate anxiety* was considered to be subjective anxiety, as well as less severe objective anxiety, i.e., mild restlessness, mild sleep and appetite disturbance, etc. *Anxiety causing considerable disturbance of personality functioning* was reported when

there were marked vegetative and psychic disturbances, caused by overt anxiety short of psychotic behavior. *Anxiety of psychotic proportions* was recorded when the loss of contact with reality was due primarily to anxiety-components in the psychiatric illness.

All the patients were seen by the author for diagnosis, for evaluation of anxiety and for judgment of results at the end of treatment. Many of the patients participated in group psychotherapy and brief individual psychotherapy. Environmental manipulation, including separation from the service or change of assignment was possible with coast guard patients. No patient who received electric shock treatment or who had chronic or acute organic brain disease or arterial hypertension was included in the study. The control group consisted of all suitable patients received from September 9, 1953 to April 23, 1954, and the Rauwolfia patients were those seen between May 6, 1954 and August 15, 1955.

The Rauwolfia patients all had five or more days on one of the Rauwolfia drugs. Two-thirds of the control group had sedation with chloral hydrate or barbiturates, while one-third of the control cases had no sedative medication. Both patient groups had occasional laxatives and aspirin.

The results in Table 1 indicate a definite decrease in anxiety, or a complete remission of anxiety, in 79 per cent of the Rauwolfia patients and 79 per cent of the control patients. The Rauwolfia medication was of the same degree of effectiveness as the treatment of the control patients, with respect to variations in the duration and severity of anxiety, as may be seen in Table 2. For example, with either the Rauwolfia treatment or the control group treatment, the more anxious patients, or those with a longer duration of anxiety, did not improve so frequently as the less anxious patients or the patients with anxiety of shorter duration. The comparison in Table 3 shows the similarity of effectiveness against anxiety of the Rauwolfia and control group treatments for each of the three major diagnostic categories: psychoneurotic disorders, schizophrenic reactions and personality disorders.

The Rauwolfia-treated patients showed the same percentage of alleviation of anxiety with each of three forms of Rauwolfia as seen in Table 4; and no significant difference in effectiveness in

Table. 2. Results in Rauwolfia patients and control patients by severity and duration of anxiety

	Rauwolfia Patients						Control Patients					
	Total Patients		No Change or Slight Decrease of Anxiety		Moderate Decrease or Complete Remission Of Anxiety		Total Patients		No Change or Slight Decrease of Anxiety		Moderate Decrease or Complete Remission of Anxiety	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Mild or moderate anxiety	26	100	4	14	22	85	16	100	2	12	14	88
Anxiety causing considerable .. disturbonce of personality functioning	27	100	6	25	21	75	19	100	3	13	16	87
Anxiety of psychotic proportions	17	100	5	30	12	70	8	100	4	50	4	50
Duration of anxiety over 1 year	16	100	6	31	10	69	17	100	4	23	13	77
Duration of anxiety 1 year and less	54	100	9	17	45	83	26	100	5	19	21	81

Table 3. Results in Rauwolfia patients and control patients by diagnostic categories

	Rauwolfia Patients		Control Patients	
	No.	Per cent	No.	Per cent
Psychoneurotic disorders:	30	100	21	100
No change or slight decrease of anxiety	5	16	3	14
Moderate decrease or complete remission of anxiety	25	84	18	86
Schizophrenic reactions:	21	100	9	100
No change or slight decrease of anxiety	7	33	3	33
Moderate decrease or complete remission of anxiety	14	67	6	67
Personality disorders:	15	100	12	100
No change or slight decrease of anxiety	3	20	3	25
Moderate decrease or complete remission of anxiety	12	80	9	75

Note: Four patients in the Rauwolfia group and one in the control group received psychiatric diagnoses outside the three major categories in the table.

Table 4. Results of three Rauwolfia drugs

	Total Patients		Some Toxicity		No Toxicity		No Change or Slight Decrease of Anxiety		Moderate Decrease or Complete Remission of Anxiety	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Reserpine	28	100	14	50	14	50	6	21	22	79
Crude root	20	100	5	25	15	75	4	20	16	80
Alseroxylon	18	100	8	45	10	55	4	22	14	78

Note: Four Rauwolfia patients are omitted since they received two forms of Rauwolfia during treatment.

this respect was demonstrated. At times, shifting from one form of Rauwolfia to another seemed to benefit an individual patient, and occasionally two different forms of Rauwolfia were more effective than one alone.

The average daily dose used in the Rauwolfia-treated patients

was as follows: reserpine, 4 mg., alseroxylon, 20 mg., and crude root, 1,000 mg. The drugs were given orally except for occasional doses of parenteral reserpine. The average time that a patient was on a Rauwolfia drug was 20 days. Dosages and duration were based on the symptomatic response of the patient. An effective therapeutic response in control of anxiety was seen with daily doses of reserpine varying from .75 mg. to 14 mg. Daily doses of the crude root varied from 300 mg. to 2,000 mg. and daily doses of alseroxylon varied from 4 mg. to 64 mg.

The Rauwolfia drugs, used orally, started to exert their effect against anxiety in two to seven days after their initiation. This usually began as a gradual definite decrease in anxiety which was often accompanied by increased tranquility and a feeling of "slowing down." The drowsiness mentioned by many of the patients is not the soporific effect of the barbiturates, chloral hydrate or paraldehyde. The Rauwolfia patients remained alert, capable of working, driving a car or participating in psychotherapy.

The schizophrenic patients received only slightly larger amounts of Rauwolfia than the group as a whole. The schizophrenic Rauwolfia-treated patients showed no alteration of basic psychopathology or primary symptoms that could be attributed to the drugs. However, a marked decrease in anxiety did take place in 14 of the 21 Rauwolfia-treated schizophrenic patients. This type of improvement often facilitated their return to work, the continuation of psychotherapy, or their travel home to another city. The control group of schizophrenic patients showed similar degrees of decrease in anxiety, which are recorded in Table 3.

Toxicity was of minor importance although it was noted in 28 (40 per cent) of the 70 Rauwolfia patients (Table 1). It was limited to mild nasal congestion in 16 of these 28 cases. This was controlled adequately by ephedrine nose drops and/or oral "Copyronil," an antihistaminic compound, given along with the Rauwolfia. The other 12 cases involved apathy, drowsiness, occasional vivid dreams, generalized weakness, fatigue, faintness, blurring of vision, nausea, dizziness, headaches, tachycardia, diarrhea, anorexia, insomnia, and frequency of urination. All these symptoms were mild and were easily controlled by a decrease in the Rauwolfia drug dosage. None of the control patients reported any toxicity because of sedation. In three patients on Rauwolfia,

a moderate increase in anxiety or tension, in combination with apathy and drowsiness, was noted when the Rauwolfia drug was started. This complaint gave way to an uneventful decrease in anxiety with a smaller dosage of Rauwolfia in two cases and a shift from reserpine to alseroxylon in the third patient.

Depression in patients treated with Rauwolfia over several months was described by Freis in 1954.[13] During the study, two patients were seen whose marked depressive symptoms began after three to four months on Rauwolfia drugs. They are not included in either of the patient groups studied. In both instances, the Rauwolfia medication had been given in other cities after diagnoses of hypertension and appeared to have acted as a precipitating factor in the depressions.

There were 16 patients with definite depressive symptoms in the Rauwolfia group in this study. Of these 16 patients, 14 had either personality disorders, or schizophrenia, or neurotic reactions. The other two were diagnosed as psychosis with mental deficiency and involutional psychotic reaction. In Table 5, this group showed essentially the same degree of reduction of anxiety with Rauwolfia drugs as both the nondepressed Rauwolfia patients and the control group. None of the patients with depressive symptoms showed an exacerbation of depression while on Rauwolfia. However, no one in this group received the drug longer

Table 5. Results in Rauwolfia and control patients with depressive symptoms

	Total No.	No Change or Slight Decrease of Anxiety		Moderate Decrease or Complete Remission of Anxiety	
		No.	Per cent	No.	Per cent
Rauwolfia patients	70	15	21	55	79
Rauwolfia patients with depressive symptoms	16	4	25	12	75
Rauwolfia patients without depressive symptoms	54	11	20	43	80
Control patients	43	9	21	34	79
Control patients with depressive symptoms	5	2	40	3	60
Control patients without depressive symptoms	38	7	18	31	82

than 40 days. The impression gained was that shorter periods of Rauwolfia treatment did not cause depression or make existing depression more severe. No evidence was seen to suggest that Rauwolfia helped alleviate depression as a symptom.

The three varieties of Rauwolfia have definite chemical differences as well as similarities. Moyer's pharmacodynamic study[14] of several forms of Rauwolfia shows no qualitative difference in their pharmacological activity, although quantitative differences are present. The writer's evaluation of the clinical effect on anxiety of reserpine, alseroxylon and the whole root showed no differences in efficiency at his dosage levels. The relative potencies in terms of this similar effect on anxiety appeared to be expressed in the following proportions: 1 mg. reserpine or 5 mg. alseroxylon; 250 mg. whole root. This is almost identical with the proportion suggested by Moyer[14] for clinical hypotensive action.

Rauwolfia serpentina drugs appear to have a role in the treatment of overt anxiety symptoms incident to a wide variety of ambulatory psychiatric illnesses. There is no evidence that these drugs are more effective than the various standard treatment methods for anxiety which may or may not include sedative medication. Nonetheless, one of them may be the sedative of choice for an individual patient where other sedatives are contraindicated or ineffective. The frequency of minor toxicity with the Rauwolfia drugs may present an obstacle to their use in certain situations. The absence of somnolence with Rauwolfia serpentina suggests its value as an adjunct to outpatient psychotherapy.

Summary

1. The effectiveness of Rauwolfia serpentina drugs in the control of overt anxiety in ambulatory psychiatric patients is equal to that of a conventional treatment of anxiety, as shown in a study of matched patient groups.

2. Three forms of Rauwolfia, reserpine, alseroxylon and the whole crude root, gave the same results in the control of overt anxiety in ambulatory patients.

3. Techniques for the clinical use of the Rauwolfia drugs are reported.

4. A wide variety of minor toxic symptoms in the use of Rauwolfia drugs was noted and easily controlled.

5. Depressive symptoms are not altered by Rauwolfia drugs given at the quantity and duration levels of this study.

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A CRITERION FOR CHRONICITY IN SCHIZOPHRENIA*

BY JAMES DRASGOW, Ph.D.

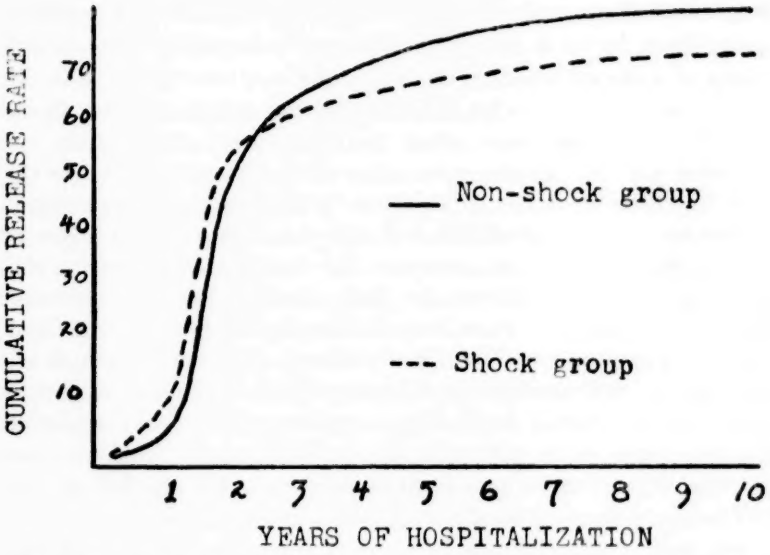
In the process of constructing a psychological test to discriminate among several psychiatric syndromes, it was necessary to isolate a relatively pure sample of chronic schizophrenics.[1] The problem of a criterion for such a group was immediately encountered. A survey of the literature revealed no consistent value for what might be considered an adequate standard in spite of much study and the collection of a good deal of material. Suitable empirical data and satisfactory theoretical material were notably absent. It is the purpose of this paper to help fill this gap in psychiatric and psychological knowledge.

A group of about a dozen psychiatrists with extensive experience in psychiatric hospital practice were asked for some indication of what they thought would be objective measures of chronicity in schizophrenia. From their replies, it appeared that the length of time a schizophrenic had been hospitalized might serve as a measure. The estimates, however, varied from three to 10 years of hospitalization before chronicity was conceded.

Since the period of three to 10 years appeared to be a very broad measure and possibly either overstringent or not stringent enough, a study was made of a group of schizophrenics who had been hospitalized for at least 10 years. The primary purpose was to see if any more specific "time-characteristics" within the 10-year period might emerge. A 10-year group was selected because the patients in this group would be considered chronic by all the psychiatrists whose opinions were asked.

The names of the first 100 consecutively-admitted schizophrenics listed on the admissions records of 10 years before this study were collected. These patients were followed up to see if and when they had been discharged. The percentages of these patients released as convalescents year by year are plotted as the solid line curve in the figure. This plot suggested that there was little likelihood of a patient being discharged after he had been hospitalized for three

*From the office of the chief counselor for men, University of Buffalo, Buffalo, N.Y.
The author wishes to express his appreciation for the co-operation of Buffalo State Hospital in this study and to professors Montague and Montgomery for their confirmations of the equations.



The solid line shows the relationship between the number of years of hospitalization and the cumulative number of schizophrenics released per hundred for a non-shock treatment group followed 10 years. This is compared with a group which received shock treatment. The difference between the groups was not statistically significant for chronic patients—that is after the first three years. For the first three years, the differences are significant. Release rates refer to releases on convalescent status.

years. A more accurate and rigorous estimate of the time was derived from the mathematical equation for this curve.* The equation also indicated that the three-year mark was the point of diminishing returns and consequently that this value could be taken as a criterion for chronicity. If one assumes that chronicity can be agreed upon if a patient has been hospitalized for 10 years, then it can be said from these data that the patients who are still hospitalized after three years are the ones who are still there at the 10-year mark—that is, three years is a sufficient criterion.

The patients of the initial group were committed 10 years before the study began. New therapeutic techniques have been introduced since that time. For example, electric-convulsive treatment began to be used at approximately its present rate in 1946 in the partic-

* $y = \dfrac{75}{1+8/7\ e^{-x}}$

ular hospital sampled, Buffalo (N.Y.) State Hospital. A possible objection to the three-year criterion found from study of the initial group of patients would be that they did not have the benefits of some newer forms of treatment, with the inference that these methods might somehow affect the group and give a different criterion picture. Another objection to the results found would be the need for crossvalidation. To help meet both of these serious objections, another sample was drawn, consisting of 100 consecutively-admitted schizophrenics who had been committed within the five years preceding the study. These data presented essentially the same results as were found with the original group. The release* percentage rate of these patients, all of whom had shock therapy, is the broken-line curve in the figure. The point of diminishing returns found from this group's equation** was again at the three-year mark. Consequently, the three-year criterion found for the first group proved satisfactory for the second group, and by generalization would be satisfactory for subsequent groups.

The only apparent effect of the newer methods of treatment as revealed by the data was a reduction in the amount of time before release on convalescent status within the first three years of commitment; the same percentage of patients was discharged within the first three years but at earlier dates. The shock methods are consequently not permitting us to help *more* patients, but rather allowing us to help the same number of patients *sooner*.

Previous research workers who have used chronic schizophrenic groups have characteristically taken purely arbitrary time criteria for chronicity. Lorr, Jenkins and Holsopple[2] arbitrarily took four years as a criterion. King[3] selected nine years. At least two major problems are implicit here: Taking too short a criterion may bias the sample with nonchronic cases, and taking too long a criterion may contaminate the sample with the effects that might accompany prolonged commitment, e.g. deterioration. Since it is often desirable, if not obligatory, in the design of an experimental research study, to have as pure a sample as possible, any contaminating effects must be minimized. Otherwise, the results can only be

*On convalescent status.

** $y = \frac{60}{1+e^{-x}}$

tentative since the effects derived from any interaction between these variables, let alone the specific effects of each, are not known.

If one were now to accept three years of commitment as a criterion of chronicity, certain definite implications would follow. For example, Solomon[4] ventured the estimate that the recovery rate practically vanished after two years of illness. The present empirical data suggest three years. This result, in effect, gives the schizophrenics an additional year of a lease on life—or health. This is particularly important, since Solomon feels that if the recovery rate practically vanishes after two years, one can then properly perform lobotomies during the schizophrenics' third year of hospitalization. The present data indicate that the recovery rate does *not* practically vanish after two years and that doing operations during the patients' third year may be too soon—because a patient may recover during this third year without one. Rather than performing lobotomies *during* the third year of hospitalization as Solomon suggests, it may be better to wait until *after* the third year. It should be recognized that both Solomon's and the present author's statements are predictions and that whichever one has the greater validity could be determined rather easily in a research study of a straightforward statistics-collecting type. It is also interesting to note in connection with Solomon's estimate that he voiced the need for a study which would establish a criterion for chronicity. The present study appears to fulfill this need.

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ON AMBIVALENCE

BY DAVID N. GRAUBERT, M.D., AND JOSEPH S. A. MILLER, M.D.

All that science creates, in fact, is the language in which it is expressed (Poincaré).

A system of concepts thus created represents a product of the scientist's experiences and his descriptive endeavor. The enthusiasm engendered by a successfully-devised new word carries through all its vicissitudes and allows us to use any of the facets which it might have acquired. In the case of the concept of ambivalence, its development has served as a vehicle for many basic thoughts related to the development of personality.

This concept was created by Eugen Bleuler. Ambivalence, he says, is a phenomenon whereby pleasant and unpleasant feelings simultaneously accompany the same experience. A mother, who laughs while speaking about the child she has murdered, presents the phenomenon of ambivalence. There are two different feelings about her act, which she cannot bring to a logical conclusion. A patient who protests that he wants to leave the "asylum" and does not do it, even if invited to do so, is also ambivalent, says Bleuler. There is a "rift between the two thoughts or the two feelings." The "idea of leaving remains governed by two ideas, contradictory and unconnected." The basis of this ambivalence is "the disturbance of association, which renders impossible their neutralization." On the contrary, it accentuates antagonistic feelings. "Ambivalent feelings come when ideas remain at different levels of consciousness."

One can, therefore, say that the Bleuler concept of ambivalence is *ambivalence by co-existence at different levels of consciousness.*

Freud took this concept and used it as an expression *of the polarity* of affective life. In describing the anal sadistic phase of the organization of infantile sexuality, he says, "Sexual life is characterized by oppositeness, active versus passive. Sexual polarity is evident at this pregenital phase. The opposite drive components are almost evenly developed and paired."

The gradual development of Freud's understanding of the concept of ambivalence may be seen from the following excerpts:

In *Notes Upon A Case of Obsessional Neurosis,* Freud says: "The conflicts of feelings of our patient are not independent of

each other but are linked together in pairs. . . . The neutralization is not possible because of the difference in consciousness—the hate is displaced into the unconscious." In discussing the problem of *negative transference,* he says, "Alongside the affectionate transference, the negative transference is present in curable cases of psychoneurosis, both often directed to the same person, a condition for which Bleuler has coined the term—ambivalence. . . . The same phenomenon has been called by D. Stekel 'bi-polarity.' In the obsessional neurosis splitting of the pairs of opposites seems to characterize the instinctual life."

In *Totem and Taboo,* ambivalence of feelings and ideas has an outstanding place. The instinctual desire, repressed by the prohibition, has been displaced into the unconscious but has not been neutralized. Both the prohibition and the instinct persist. The psychological constellation, which is so fixated as to express two contradictory attitudes toward an object, exemplifies ambivalence.

Polarity and contrast in affects and ideas play an increasing role in Freud's consecutive writings. He was greatly impressed by Kurt Abel's publication about the double and antagonistic significance of words in ancient languages. In the case of the Egyptian language, a word like "strong" signifies "weak"; "light" also means "darkness." Abel explains that polarity is due to the fact that we can grasp one side of a meaning only in relation to the other side—there is no light without darkness, there is no strength without weakness. Small changes in words, changes of one letter, for instance, or change of sequence of letters in words, bring out opposite or antagonistic meaning.

According to Freud, *taboo* is such an ambivalent word. With the decreasing significance of ambivalence in the more culturally developed individual and with more advanced adaptation, the word taboo retained only the prohibiting and not the positive part.

In the paper, "Instincts and Their Vicissitudes," Freud develops fully his concepts of polarity. He says: "The characteristic of the fate or vicissitudes of an instinct is its reversibility to its opposite. It is represented by reversing from activity to passivity and by the reversing of contents. In the first it is *the aim* which is reversed—sadism to masochism, or voyeurism to exhibitionism." A sample of reversal of *contents* is the change of love into hatred.

The transformation of a drive into its opposite, or a change of

its direction does not affect the totality of energy involved, Freud proceeds to say. There is a lag which results in the persistence of an antagonistic feeling tone. Therefore, if in the development of a drive, its antagonist appears and persists simultaneously, ambivalence is manifested. The transformation of the *"content"* of a drive into its opposite is seen in only one instance: in the transformation of love into hate. "The co-existence of these two, simultaneously directed towards the same object, is the most outstanding example of ambivalence." This ambivalence of feeling is subjected, however, to three more basic polarities—those of subject-object, pleasure-pain, and activity-passivity. These three basic polarities are interlaced and interrelated. The ambivalence of affect, however, is in itself polar and antagonistic. Ambivalence of love is expressed in the oral phase, for example, by incorporation, which, at the same time, destroys and annihilates the object. In the anal sadistic phase of the striving for mastery of the object, this drive manifests itself concurrently in the destruction of the object. In this paper, Freud is already struggling with the concept of ambivalence of feeling caused by the cathexes of opposing objects, and the ambivalence due to antagonistic aims and drives.

In "Repression and the Return of the Repressed," the mechanism of reaction formation and appearance of symptoms, together with the question of ambivalence, is discussed. Freud states that reaction formation is made possible by the ambivalent relation into which the sadistic impulse, destined for repression, has been introduced. This ambivalence, which makes repression possible by reaction formation, also acts as a lever, making for the return of the repressed. The shift of psychic energy into both polar positions makes reactions in both directions possible.

Freud takes up next the comparison of the problem of ambivalence in the child with that in the adult. Here he points out the unusual tolerance of the child's ego to its conflicting and antagonistic feelings. As, for instance, the feelings of the child toward its father. Hate and love exist side by side. In the adult, this would result in conflict.*

*The work of Hartmann, Kris and Lowenstein, on ambivalence as caused by love and deprivation in children, coming from the same parent figure, is not discussed in the present paper. The writers have attempted to discuss genetic and developmental aspects of ambivalence only as far as necessary to point out the changes in the content and meaning of the term.

Viewing the development of the Oedipus complex, hateful feelings follow friendly and tender ones. Their *simultaneous* occurrence is a good example of ambivalence. During the anal sadistic phase of development, there are many complications which give rise to ambivalent feelings. The passive drives appear simultaneously with, or shortly after, the active sadistic ones. This is not a change in drive but a change in direction of the drive. In the child, ambivalent feelings against his environment can exist for a long time next to each other without conflict and without ego interference. When, ultimately, a conflict between two feelings is perceived, the child changes the object to which he attaches one of the ambivalent part-feelings. In the neurotic, a similar mechanism operates in either repression or fantasy formation. Only when fantasy acquires such energy cathexis that its presence is no longer tolerable, does the ego interfere. With the growth of personality, with the integration of all the sexual drives, a similar integration of personality and a unification of the ego appear, which make such ambivalence intolerable.

Ambivalence can also be a function of primary identification and a function of an individual's bisexuality. With the increased sexual accentuation of feelings toward the mother, the male child develops a feeling of hatred in the process of identification with the father. This creates the basis of ambivalence toward the father figure. The child's bisexuality, however, is the basis of the creation of the complete Oedipus complex. The child, therefore, develops—by alternate identification with the mother and father—ambivalent feelings toward both parties.

Thus far, it has been indicated that the term "ambivalence" has been used as an expression of the *co-existence* of drives that are not neutralized because of differences in levels of consciousness; or, as in the child, because of insufficiently developed ego strength. Ambivalence has then been seen as due to the *polarity* of opposite drives—this, in turn, due either to basically determined opposite-ness in human feelings and human drives, or to the cathexes of opposite drives that are necessary for the maintenance of equilibrium of the human personality and its psychosexual development.

In *Beyond the Pleasure Principle,* a new concept is brought forth—*ambivalence by fusion of drives* and by participation of partial drives. Ambivalence is already present because happenings

in the psyche are not exclusively or primarily ruled by the pleasure principle; so that an insufficient discharge of tension, in the form of neurotic pain, is in reality a pleasurable happening, because it ends in a discharge of energy; but it cannot be felt consciously by the ego as pleasure. The repetition drive, as used in therapy and as appearing in traumatic neurosis, in spite of creating so many unpleasant and fearful feelings, is, at the same time, a function of the ego following the pleasure principle. The oscillation of feeling between the painful and the pleasurable is an expression of the antagonism of life and death drives, and of the polarity in object love of tender feelings and aggression.

The purpose of the death drive Thanatos, is to transform organic substances into inorganic. The task of Eros is to create life by a more complex integration of atomized living matter. Both drives, therefore, work in the same direction—toward recovery of the balance disturbed by life. Life is, therefore, a compromise of the two drives, a phase between the initiation of life and its end. The interaction and *fusion* of the two drives is observable in the development of the individual and in the phylogenetic growth from elementary cells to the higher orders of organism, endowed with a multiplicity of means of protection. The separation of the two drives is the basis of ambivalence. Ambivalence, which appears as an especially "marked constitutional disposition," would be caused by a failure of fusion. Ambivalence cannot be interpreted as a succession of antagonistic drives. Hate is the regular accompaniment of love. Love and hate can directly merge with each other.

Another example of dissolved ambivalence is sadism. It is the death drive which is forced from the ego into the object world under the influence of the narcissistic libido. It enters then into the service of the sexual function. In the pregenital stage, it causes the destruction of the love object. In the genital phase, it serves the mastery of the sexual object. Where the original sadism does not become attenuated, it creates the love-hate ambivalence of love life.

The study of paranoia, of the pathogenesis of homosexuality, and of desexualized feelings of social rivalry, shows that primary ambivalence serves as a vehicle for the transfer of energy. The economy of the discharge of energy directs the creation of a re-

active displacement of cathexis. It does not matter to the pleasure principle, which is still functioning, in what direction the displacement takes place—as long as the displaceable libido is disposed of.

Fenichel places the phenomenon of ambivalence in the basic structure of metapsychology of the personality. In his discussion of the mechanism of identification, he points out that identification is regression to a primitive overture-stage of object love. It is a way of gratifying id impulses by alteration of the ego structure. It is a compromise, leading to the formation of ego "precipitates" hostile to drives, and to an alteration of aim through desexualization. This antagonism in the psyche is, however, only apparent as a substitute gratification in the form of identification; it is not concerned with obtaining pleasure but with the maintenance of psychic equilibrium.

The end state, however, assures the final victory of the pleasure principle by diminishing or relieving tension. Antagonism and ambivalence, however, also appear in the mechanism of identification. The development of personality is determined by the fusion of the drives at the achievement of higher levels of organization. When object love is replaced by identification and, therefore, a regression takes place, a defusion or separation of drives follows. The effective means of identification is found in the form of oral incorporation. Therefore, identification expresses tender and destructive wishes in a simultaneous, ambivalent way.

Hereby, one arrives at three basic features manifested in regression: identification as a method of gratification; narcissism as an expression of the backward flow of genital libido to pregenital zones; and ambivalence as the vehicle and pattern of energy distribution.

It is a long way since the term libido was designated for that form of psychic energy which is the motive force of sexuality; the second drive has changed name and designation. In spite of pointing out the possibility of the existence of more drives, Freud is the father and propagator of the dualistic concept of drives. Even after the turning point in the early 1920's, when psychoanalysis fused the two drives of Eros and Thanatos to create a kind of continuum—with life as the span between the two potential gradients—the components of the elementary

drives, and the alternation of pleasure and unpleasure, have been maintained. Depriving the ego of its drive status and the concept of neutral ego-energy have not diminished the multivalent aspect derived from the multiple interlacing and combination of elemenary forces which are ready to show their basic underlying ambivalence at the first sign of regression.

Summary

The term "ambivalence" has acquired a well-grounded place in the psychiatric vocabulary. The meaning and contents of the term, however, have changed imperceptibly during two generations of using it.

From a quasi-static concept as seen by Bleuler it developed finally into the present-day dynamic concept of energetic equilibrium. In this paper, the development of the concept, and the differences in the meaning and use are discussed in an attempt to clarify the concept and its increasing importance in psychoanalytic and psychodynamic theory.

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TUBERCULOSIS IN SCHIZOPHRENIA AS COMPARED WITH OTHER TYPES OF MENTAL DISEASE

BY JULIUS KATZ, M.D., SOLOMON KUNOFSKY, AND BEN Z. LOCKE

In a previous paper[1] it was shown that the higher tuberculosis morbidity and mortality rates among mental patients, as compared with the mentally well, can be explained by differences in factors of epidemiologic importance, such as age distribution, contact with infectious cases of tuberculosis, the amount of tuberculosis in the population from which the patients are drawn, and the presence of co-existing organic disease. One of the conclusions drawn in that paper was that, in explaining differences in rates among the mentally ill as compared with the mentally well, it is not necessary to assume any unusual constitutional susceptibility of mental patients, since the differences can be explained upon the basis of environmental factors.

It is the purpose of this paper to compare the tuberculosis morbidity and mortality among schizophrenic patients with those suffering from other mental conditions. The reason for emphasis upon schizophrenia is the common impression that patients with this form of mental disease have a constitutional lack of resistance to tuberculosis which other patients do not have, or have to a lesser degree. An example of this impression may be cited from an outline, presented to the director of one of the state mental hospitals, of a proposed study of the effects of sex steroids upon tuberculosis in schizophrenic patients. The protocol for this study began with, and was based upon, the statement that, "it is a fact well known to psychiatrists that tuberculosis in the schizophrenics runs an unfavorable course, with a higher mortality rate than in non-schizophrenics." The validity of this impression is the main consideration of this report.

Materials and Methods

The data presented were obtained during the course of a tuberculosis control program conducted since 1941 by the New York State Departments of Health and of Mental Hygiene among the patients in the mental hospitals of the latter department, with an average population during the period of 80,000. This program includes chest roentgenographic examination of all patients on

admission and periodically thereafter. From 1941 through 1954, periodic chest roentgenographic surveys were made four times in each of the 18 hospitals, and five times in 14 of them.

The data shown in the tables were obtained as follows:

1. The prevalence of tuberculosis among patients on admission to mental institutions was calculated on an annual basis. Only the average rates for each group of patients, in 11 mental diagnostic categories used, are shown. Also age specific rates are shown for schizophrenics and all other patients.

2. Incidence rates were based on the numbers of new cases developed and person-years of exposure between chest x-ray surveys. Since only 14 hospitals had a fifth survey, the incidence in the last period is based on these hospitals only. They contain about three-fourths of the patients in all hospitals.

3. Survival rates were obtained by life table methods for new cases which developed within the institutions after the beginning of the program, from 1942 through 1950. The maximum follow-up was nine years. Some of these data were previously reported, but not by mental diagnosis.[2]

4. Reactivation rates were based on patients whose disease became inactive in the institutions after the beginning of the program.

5. Tuberculosis mortality data were based upon: (a.) The number of deaths among the patient population; the data for three years at five-year intervals were obtained from annual reports of the Department of Mental Hygiene; (b.) The same data from which survival rates were obtained, an average for the nine-year period being shown. While the rates in (a.) are based on the total numbers of patients in the various diagnostic groups, those in (b.) are based upon only the tuberculosis patients in these groups.

6. The incidence of tuberculosis among the various types of schizophrenia is shown for the period between the third and fourth survey, as earlier data are not available. The rates were obtained in the same way as the incidence for the other groups mentioned.

The mental diagnoses were all made by psychiatrists on the staffs of the mental hospitals.

The term clinically significant tuberculosis is used to denote pulmonary tuberculosis which is active or arrested, according to

the 1950 edition of the *National Tuberculosis Association's Diagnostic Standards,* or is active, apparently arrested, or arrested, according to the 1940 edition. Cases considered inactive in the 1950 edition, or apparently cured in the 1940 edition, are not considered clinically significant.

Results

1. *Prevalence of Tuberculosis Among Patients on Admission to Mental Hospitals*

If schizophrenic patients are constitutionally more susceptible to tuberculosis than those with other types of mental disease, this greater susceptibility may be expected to be apparent at the time of admission to mental hospitals. Contrary to this expectation, however, it was found that among 77,538 patients admitted to mental hospitals between 1949 and 1953, schizophrenia was only ninth among 11 classifications in the relative frequency of tuberculosis among males, and seventh among females (Table 1A). That this is not due to a favorable age distribution is shown

Table 1. Prevalence of Pulmonary Tuberculosis Among First Admissions to State Mental Hospitals, by Sex, Age, and Mental Diagnosis, for the Period 1949-1953.

A. Prevalence Among First Admissions by Sex and Mental Diagnosis

Mental Diagnosis	Total		Males		Females	
	Rate per 100 admissions	Rank	Rate per 100 admissions	Rank	Rate per 100 admissions	Rank
Paranoia and paranoid conditions	4.7	(1)	7.3	(1)	1.5	(6)
Alcoholic psychosis	4.6	(2)	5.1	(2)	3.0	(1)
Others	2.7	(3)	3.2	(4)	2.0	(2)
Psychosis with syphilis of central nervous system	2.5	(4)	3.1	(5)	1.3	(8)
Manic-depressive psychosis	2.5	(5)	3.3	(3)	2.0	(3)
Psychosis with mental deficiency	2.0	(6)	2.2	(8)	1.7	(4)
Schizophrenia	1.7	(7)	2.0	(9)	1.4	(7)
Psychosis with convulsive disorders	1.6	(8)	1.7	(11)	1.5	(5)
Psychosis with cerebral arteriosclerosis	1.5	(9)	2.3	(7)	0.7	(11)
Involutional psychosis	1.4	(10)	2.8	(6)	0.8	(9)
Senile psychosis	1.1	(11)	1.8	(10)	0.7	(10)

B. Prevalence by Sex and Age for Schizophrenics and "All Others"

Age	Rate per 100 Admissions					
	Total		Males		Females	
	Schizophrenia	Others	Schizophrenia	Others	Schizophrenia	Others
All ages	1.7	2.0	2.0	2.9	1.4	1.1
Under 45	1.6	2.2	1.7	2.2	1.4	2.1
45-65	2.3	3.0	3.7	4.6	1.4	1.1
65 and over	2.7	1.3	8.2	1.9	0.0	0.7

by the fact that up to the age of 65 schizophrenics had lower rates than others (Table 1B). Thus it is evident that before admission to mental hospitals, these patients do not suffer from any greater innate lack of resistance to tuberculosis than do other mental patients.

2. *Incidence of Tuberculosis Among Patients Within Mental Hospitals*

Since the term "incidence" indicates the rate of development of tuberculosis during a specific time interval, the average annual rates obtained in the period between the first and second chest roentgenographic surveys are used as a basis for comparison with rates obtained in subsequent survey periods. Table 2 shows, for the first time period, incidence rates higher among schizophrenic patients than among others. However, the difference between the two groups became smaller with time, so that whereas there was an excess of 58 per cent in rates for schizophrenic patients as contrasted with all other patients, between the first and second surveys, it was only 8 per cent between the fourth and fifth, a difference which is not statistically significant. Even these differences were eliminated when an adjustment was made for age in order to make the two groups more comparable. Table 3 shows the crude and age-adjusted rates for white patients, who constitute 89 per cent of the patient population. In the period between the first and second surveys, this adjustment reduced the difference in incidence from 57 to 41 per cent, while during the period between the fourth and fifth surveys, the difference was eliminated entirely.

It is difficult to determine what factors contributed to the more frequent development of tuberculosis in the earlier years of the program. Brill[3] states that "there may be a non-specific relation-

Table 2. Rates of Development of Pulmonary Tuberculosis Among Patients in Four Survey Periods by Sex, and Mental Diagnosis

Mental Diagnosis	All Patients			Males			Females		
	Person-years	Cases of Tbc.	Rates Per 1,000 P-Y	Person-years	Cases of Tbc.	Rates Per 1,000 P-Y	Person-years	Cases of Tbc.	Rates Per 1,000 P-Y
I. Period Between 1st and 2d surveys									
Total	275,636	1,380	5.01	126,765	891	7.03	148,871	489	3.28
Schizophrenics	159,501	944	5.92	72,560	614	8.46	86,941	330	3.80
Others	116,135	436	3.75	54,205	277	5.11	61,930	159	2.57
Difference between Schizophrenics and others			58%			66%			48%
II. Periods Between 2d and 3d surveys									
Total	247,651	753	3.04	111,760	506	4.53	135,891	247	1.82
Schizophrenics	142,129	454	3.19	63,435	305	4.81	78,694	149	1.89
Others	105,522	299	2.83	48,325	201	4.16	57,197	98	1.71
Difference between Schizophrenics and others			13%			16%			11%
III. Periods Between 3d and 4th surveys									
Total	193,860	403	2.08	88,028	262	2.98	105,832	141	1.33
Schizophrenics	111,835	250	2.24	50,431	160	3.17	61,404	90	1.47
Others	82,025	153	1.87	37,597	102	2.71	44,428	51	1.15
Difference between Schizophrenics and others			20%			17%			28%
IV. Periods Between 4th and 5th surveys (14 hospitals)									
Total	106,786	192	1.80	48,013	127	2.65	58,773	65	1.11
Schizophrenics	61,991	115	1.86	27,671	76	2.75	34,320	39	1.14
Others	44,795	77	1.72	20,342	81	2.51	24,453	26	1.06
Difference between Schizophrenics and others			8%			10%			8%

ship since mental illness in general may lead to such unhygienic behavior as overactivity, resistiveness, refusal of food, uncleanliness, and eating of foreign materials which would be expected to influence both the incidence of the disease and its progress."

Table 3. Incidence of Pulmonary Tuberculosis for White Patients, by Mental Diagnosis, Sex, and Period Between Surveys; Crude and Age-Adjusted Rates

Period between surveys	Total		Males		Females	
	Schizophrenics	Others	Schizophrenics	Others	Schizophrenics	Others
Crude Rates per 1,000 person-years						
1st-2d surveys	5.8	3.7	8.3	4.9	3.6	2.6
2d-3d surveys	3.0	2.7	4.7	4.0	1.7	1.5
3rd-4th surveys	2.1	1.7	3.0	2.6	1.3	1.1
4th-5th surveys*	1.8	1.7	2.7	2.6	1.1	1.0
Adjusted Rates per 1,000 person-years						
1st-2d surveys	5.5	3.9	7.9	5.1	3.5	2.9
2d-3d surveys	3.0	2.8	4.6	4.2	1.6	1.7
3d-4th surveys	2.0	1.8	2.9	2.6	1.3	1.2
4th-5th surveys*	1.8	1.8	2.6	2.7	1.1	1.1

*14 hospitals only.

Table 4. Survival Rates of New Cases of Pulmonary Tuberculosis by Mental Diagnosis Through Nine-year Follow-up

Years After Diag.	Schizophrenic Patients				All Other Patients			
	Average No. at Risk*	No. of Deaths	Annual Survival Rate Per cent	Cumulative Survival Rate Per cent	Average No. at Risk*	No. of Deaths	Annual Survival Rate Per cent	Cumulative Survival Rate Per cent
0-1	1,240	362	70.8	70.8	611	245	59.9	59.9
1-2	801	89	88.9	62.9	342	49	85.7	51.3
2-3	687	42	93.9	59.1	265	35	86.8	44.5
3-4	516	26	95.0	56.1	167	11	93.4	41.6
4-5	328	15	95.4	53.5	117	10	91.5	38.1
5-6	225	8	96.4	51.6	72	3	95.8	36.5
6-7	126	2	98.4	50.8	35	—	100.0	36.5
7-8	53	1	98.1	49.8	24	—	100.0	36.5
8-9	25	—	100.0	49.8	10	—	100.0	36.5

*Average number present during the year.

Table 5. Number of Patients at Time of First Tuberculosis Diagnosis, Survival Rates After One Year, and Cumulative Survival Rates at the End of Five Years for New Cases of Pulmonary Tuberculosis, by Mental Diagnosis, Age, Sex, and Stage of Disease

	Males—Age						Females—Age					
	24-44		45-64		65 & over		24-44		45-64		65 & over	
	Schizo.	Other	Schizo.	Other	Schizo.	Other	Schizo.	Other	Schizo.	Other	Schizo.	Other
Minimal Pulmonary Tuberculosis												
No. of cases at beginning of period	224	32	117	74	27	38	77	29	68	41	20	14
Survival rate at end of one year—per cent	95.5	90.6	96.6	93.2	96.3	78.9	90.9	86.2	98.5	90.2	95.0	78.6
Cumulative survival rate at end of five years—per cent	84.2	81.4	81.5	66.6	83.6	53.3	82.9	59.0	84.9	55.4	59.5	78.6
Moderately Advanced Pulmonary Tuberculosis												
No. of cases at beginning of period	78	15	66	43	9	25	44	4	39	24	11	11
Survival rate at end of one year—per cent	75.6	80.0	83.3	62.8	100.0	76.0	72.7	50.0	71.8	75.0	81.8	54.5
Cumulative survival rate at end of five years—per cent	51.5	56.6	69.0	26.5	55.5	30.5	51.6	0.0	58.3	49.8	46.7	43.6
Far Advanced Pulmonary Tuberculosis												
No. of cases at beginning of period	96	20	57	54	19	30	36	20	38	23	10	14
Survival rate at end of one year—per cent	39.6	10.0	31.6	20.4	31.6	20.0	30.6	25.0	10.5	26.1	0.0	21.4
Cumulative survival rate at end of five years—per cent	9.3	5.0	14.3	9.3	0	0	8.9	5.0	7.0	4.4	0	0

Whatever the causes may have been, the fact that the differences were eliminated within a period as short as 12 years suggests that these factors are not constitutional in nature.

Table 6. Reactivation of Inactive Tuberculosis, by Mental Diagnosis, Age, Sex, and Stage of Disease before Inactivation

Mental Diagnosis & Age	Total			Males			Females		
	Person-years	Number of React.	Rate Per Cent	Person-years	Number of React.	Rate Per Cent	Person-years	Number of React.	Rate Per Cent
All Schizophrenic Pts* ..	5,080	135	2.7	2,499	94	3.8	2,581	41	1.6
All Others	1,663	43	2.6	812	24	3.0	851	19	2.2
Minimal Pulmonary Tuberculosis Before Inactivation									
All Ages, Schizophrenic	4,206	109	2.6	2,125	73	3.4	2,081	36	1.7
All Ages, Others.	1,374	30	2.2	663	15	2.3	711	15	2.1
Age 25-44 Schizophrenic	1,351	45	3.3	871	32	3.7	480	13	2.7
Age 25-44 Others	227	6	2.6	135	3	2.2	92	3	3.3
Age 45-64 Schizophrenic	2,146	47	2.2	964	33	3.4	1,182	14	1.2
Age 45-64 Others	808	15	1.9	374	6	1.6	434	9	1.8
Age 65 & Over, Schizophrenic .	646	13	2.0	260	6	2.3	386	7	1.8
Age 65 & Over, Others	330	9	2.7	145	6	4.1	185	3	1.6
Moderately Advanced & Far Advanced Pul. Tbc. Before Inactivation									
All Ages, Schizophrenic	874	26	3.0	374	21	5.6	500	5	1.0
All Ages, Others.	289	13	4.5	149	9	6.0	140	4	3.6
Age 25-44, Schizophrenic	214	7	3.2	158	6	3.8	56	1	1.7
Age 25-44, Others	46	1	2.2	20	1	5.0	26	—	—
Age 45-64, Schizophrenic	437	14	3.2	174	13	7.5	263	1	0.4
Age 45-64, Others	169	9	5.3	95	6	6.3	74	3	4.1
Age 65 & Over, Schizophrenic .	215	5	2.3	42	2	4.8	173	3	1.7
Others	74	3	4.1	34	2	5.9	40	1	2.5

*Includes patients under 25 years of age.

3. *Survival of Mental Patients from Tuberculosis*

Schizophrenic patients who develop tuberculosis react to the disease as well as persons suffering from other types of mental illness. Table 4 shows that their survival rates are not significantly different from those of the other patients. This is true whether the two groups are compared by age, sex or stage of disease (Table 5).

4. *Reactivation of Inactive Tuberculosis*

Among those with enough resistance to bring their tuberculous disease to an inactive state, schizophrenic patients were able to

Table 7. Deaths and Death Rates from Tuberculosis Among Mental Patients, by Type of Mental Disease 1942, 1947, 1952*

Psychosis	1942			1947			1952		
	Number of patients	Deaths from Tbc.	Death Rate Per 1,000	Number of patients	Deaths from Tbc.	Death Rate Per 1,000	Number of patients	Deaths from Tbc.	Death Rate Per 1,000
All patients	72,717	350	4.8	75,175	454	6.0	86,385	242	2.8
Schizophrenic patients	42,558	182	4.3	44,576	248	5.6	50,608	112	2.2
All other patients ..	30,159	168	5.6	30,599	206	6.7	35,777	130	3.6
Psychosis with syphilis of CNS	3,506	13	3.7	3,446	—	—	3,361	14	4.2
Alcoholic psychosis	2,010	13	6.5	2,057	26	12.6	2,987	12	4.0
Psychosis with cerebral arteriosclerosis	5,468	33	6.0	5,784	36	6.2	7,708	26	3.4
Psychosis with convulsive disorders	1,496	5	3.3	1,531	10	6.5	1,722	6	3.5
Senile psychosis ..	2,886	15	5.2	3,557	38	10.7	5,053	16	3.2
Involutional psychosis	2,775	15	5.4	3,118	23	7.4	3,708	6	1.6
Manic-depressive psychosis	4,471	17	3.8	3,695	23	6.2	3,178	6	1.9
Paranoia and paranoid conditions	972	1	1.0	849	3	3.5	762	—	—
Psychosis with mental deficiency	2,523	15	5.9	2,683	21	7.8	3,097	6	1.9
Other psychoses ..	4,052	41	10.1	3,879	26	6.7	4,201	38	9.0

*Data from annual reports of the Department of Mental Hygiene.

maintain the inactive status of the disease about as well as other mental patients. Table 6 shows that while male schizophrenic patients with minimal tuberculosis have a higher reactivation rate than the others, this is compensated for by lower rates among those with advanced tuberculosis; while, among women, schizophrenic patients show lower reactivation rates in all stages of the disease. In general, there is no statistically significant difference in reactivation rates between schizophrenics and others.

5. *Tuberculosis Mortality*

Contrary to the common impression, mortality from tuberculosis is not higher among schizophrenic patients than among patients with other mental disease. Thus in Table 7 it can be seen that patients in most of the other mental diagnostic categories have higher tuberculosis mortality rates. Among patients who developed their tuberculosis in the mental hospitals, schizophrenics also showed lower mortality rates (Table 8).

Table 8. Average Mortality Among New Cases of Tuberculosis Developed in Mental Hospitals over a Nine-Year Period, by Sex, Stage of Disease, and Mental Diagnosis

Mental Diagnosis	Total			Males			Females		
	Person-years	Number of Deaths	Mortality Per Cent	Person-years	Number of Deaths	Mortality Per Cent	Person-years	Number of Deaths	Mortality Per Cent
All Stages									
Schizophrenia	4,001	545	13.6	2,695	344	12.8	1,306	201	15.4
Others	1,643	353	21.5	1,051	222	21.1	592	131	22.1
Minimal									
Schizophrenia	2,479	97	3.9	1,682	62	3.7	797	35	4.4
Others	957	76	7.9	621	45	7.2	336	31	9.2
Moderately Advanced									
Schizophrenia	978	128	13.1	629	78	12.4	349	50	14.3
Others	401	82	20.4	260	57	21.9	141	25	17.7
Far Advanced									
Schizophrenia	544	320	58.8	384	204	53.1	160	116	72.5
Others	285	195	68.4	170	120	70.6	115	75	65.2

Table 9. Incidence of Pulmonary Tuberculosis Among Schizophrenic Patients between Third and Fourth Surveys by Sex and Type of Schizophrenia (cases per 1,000 person-years)

Sex	All Schizophrenic Patients*			Simple			Hebephrenic			Catatonic			Paranoid		
	Person-years	Cases	Rate per 1,000	P-Y	Cases	Rate per 1,000	P-Y	Cases	Rate per 1,000	P-Y	Cases	Rate per 1,000	P-Y	Cases	Rate per 1,000
All Patients	111,711	256	2.3	4,406	9	2.0	24,461	46	1.9	20,737	42	2.0	58,170	124	2.1
Males	50,369	160	3.2	2,805	8	2.9	12,539	30	2.4	8,512	23	2.7	24,597	81	3.3
Females	61,342	96	1.6	1,601	1	0.6	11,922	16	1.3	12,225	19	1.6	33,573	43	1.3

*Includes "other forms" of schizophrenia and type "not stated."

6. Tuberculosis Mortality and Morbidity by Type of Schizophrenia

As shown in Table 9, there is no significant difference in the incidence of tuberculosis among the four subgroups of schizophrenia. Similar data for survival and reactivation are not available.

Discussion

The data presented show no material difference in tuberculosis morbidity and mortality among schizophrenics as compared with other mental patients. Upon admission to mental hospitals, they have no more tuberculosis than the others. When they develop tuberculosis within the institutions, their chances of surviving the disease are as good. Those who succeed in bringing their tuberculosis to an inactive state are as capable of maintaining the inactive status as the others. Finally, their mortality from tuberculosis is not higher. As a consequence, the assumption of a greater susceptibility of schizophrenic patients to tuberculosis is unwarranted.

What, then, is the genesis of the impression that schizophrenics have a constitutional lack of resistance to tuberculosis not found in the others?

It is probably due to the obvious but not fully appreciated fact that numerically, schizophrenics comprise the largest single group of institutionalized patients,[4] and that their stay in institutions is considerably longer. Since the median duration of hospitalization of schizophrenic patients is about 11.3 years as compared with about 3.1 years for other mental patients,[5] in spite of similarity in the two groups, of the prevalence of tuberculosis on admission, and of the incidence of new cases as time goes on, the longer period of hospitalization of the schizophrenics results in the accumulation of larger numbers of these patients, who are exposed to infection for longer periods, with a correspondingly large number of tuberculous patients among them.

Uncritical observation of this large number of cases of tuberculosis among schizophrenics undoubtedly has left the impression among some psychiatrists that tuberculosis develops more frequently among these patients. Furthermore, the large number of deaths among these patients evidently led to the conclusion

that schizophrenics have an inherent lack of resistance against tuberculosis. Because patients with other types of mental disease appeared to die of tuberculosis less frequently, the assumption was probably extended to indicate that the supposed constitutional lack of resistance to tuberculosis did not exist, or existed to a much smaller extent, among them than among schizophrenics.

Since the epidemiological data presented show that tuberculosis as a cause of illness and death is not more frequent or more serious among schizophrenic patients than among those with other mental disease, the assumption of a greater constitutional susceptibility to tuberculosis among them is unnecessary.

Summary and Conclusions

1. The prevalence of tuberculosis among schizophrenics at the time of admission to mental hospitals is not higher than among patients with other mental diseases.

2. Schizophrenic patients within mental hospitals do not develop tuberculosis more frequently than others.

3. Schizophrenics who develop tuberculosis survive the disease as long as other patients.

4. Schizophrenic patients with inactive tuberculosis do not reactivate their disease more frequently than others.

5. The tuberculosis mortality among schizophrenic patients is no higher than among patients with other mental diseases.

6. There is no evidence of a relationship between the type of schizophrenia and the incidence of tuberculosis.

7. Since the tuberculosis morbidity and mortality among schizophrenics is essentially the same as among patients with other types of mental disease, there is no greater susceptibility to this disease among the former than the latter, and there is no need to assume the existence of constitutional differences in their reaction to tuberculosis.

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THE ROUTINE TERMINATION OF THERAPEUTIC HYPOGLYCEMIC COMAS BY PERIPHERAL ELECTRICAL STIMULATION: A CASE REPORT*

BY CHARLES H. JONES, M.D.

The analeptic action of peripherally applied electrical currents in hypoglycemic coma was first demonstrated at Northern (Washington) State Hospital in July 1954.[1] It was deduced that peripheral stimulation would awaken patients from coma, when the work of Hoffman and Wunsch[2] in arousing patients from hypoglycemia with cerebrally applied unidirectional currents was considered in the light of later work by Blachly and Brookhart.[3] Their animal experiments showed that such currents affect respiration and bring about arousal of dogs from barbiturate coma through peripheral nervous pathways rather than by transcerebral action. The usefulness of peripheral electrical stimulation in overcoming hypoglycemic coma has since been convincingly demonstrated on 18 Northern State Hospital patients by one to six trials on each. In each instance, the onset of coma was determined by the criteria of Himwich[4] for the subcorticodiencephalic phase. In this phase, there is a complete loss of environmental contact, and a variety of motor, sensory and autonomic manifestations are seen which are indicative of release of the subcorticodiencephalon. The writer has advanced the hypothesis[1] that peripheral electrical stimulation produces arousal from hypoglycemic coma by providing extraordinary afferent input in the form of continuing, repeated, nociceptive and proprioceptive impulses to the reticular activating system—of which the multisynaptic, internuncial organization has been previously inhibited by diminished substrate for cellular metabolism to the degree that normal afferent input was unable to maintain consciousness.

Some patients of the group, aroused from hypoglycemic coma by peripheral electrical stimulation, have shown marked changes in behavior. Often, striking improvement has occurred from a single termination by this method. In another study[5] peripheral electrical stimulation produced a beneficial therapeutic effect when given in courses of 20 treatments with and without barbiturate anesthesia. Therefore, it appeared logical to try peripheral

*From Northern State Hospital, Sedro Woolley, Washington.

electrical stimulation as a routine daily method of terminating hypoglycemic comas—both to enhance the safety of this form of treatment, and perhaps to demonstrate a synergistic or additive therapeutic effect. It is thought that the following case is the first instance in which termination of therapeutic hypoglycemic comas has been done routinely by peripheral electrical stimulation.

Case Report

W. W., a 34-year-old, married man, a sign painter, was admitted to Northern State Hospital, November 18, 1954, suffering from an acute mental illness of four days in duration. His employer noticed that he was in "a daze" while painting a sign. When the man was questioned, he fell to his knees, prayed and cried bitterly, saying that he could hear God's voice instructing him how to eat. His wife took him to the family doctor who recommended that they consult a psychiatrist. While driving to the appointment, the patient suddenly seized the wheel of the car and tried to turn it through a guard rail on the highway into Lake Samish. His wife managed to get him home and called the police.

While he was entering the police vehicle, he became violently unmanageable and did a great deal of damage to the car before finally being restrained. It was reported that it had taken five men to hold the patient. He was admitted in restraint and, although co-operative, said that he heard the voice of the Lord and that he felt that he had been sent to the hospital because he had killed his friend's wife and child. As days passed, he became very seclusive in the ward and appeared to be preoccupied.

His delusions changed steadily. He said the government was trying to kill him because of six murders. He felt that he was being influenced by the people around him on the ward. He said his auditory hallucinations were connected in some way with treatment. Also, he complained of visual and gustatory hallucinations. After continued study, the diagnosis of catatonic schizophrenia was established. His history showed no previous neuropsychiatric disorders, except for attacks of paroxysmal tachycardia, beginning in military service in 1941 and since occurring at frequent intervals.

A Funkenstein test on November 30, 1954 showed a moderate hypotensive response to mecholyl which persisted six points below the resting level through 20 minutes of the test. Adrenalin produced a sharp rise in systolic blood pressure, from a resting level of 120 to 180, and a mild anxiety attack. The patient was started on Alexander's method of convulsive-nonconvulsive electric shock[6] on December 1, and completed a series of 20 treatments January 5, 1955. There was gradual improvement during treatment, and, for a few days following the end of the course, he was relatively well. However, by January 14, he was again reacting to auditory hallucinations and declaring that he had killed many people, including children. On January 15, the patient suddenly ran down the hall diving headfirst into a radiator and suffering a four-inch scalp laceration. He was observed closely, but did not show signs or symptoms of concussion. The Funkenstein test on January 20 showed an inadequate hypotensive response to mecholyl, although the drug produced many objective parasympathetic effects. Adrenalin produced a systolic blood pressure rise of 40 points without observable anxiety, although the patient said he felt "afraid."

Insulin coma therapy began on January 22, with 10, 20, 30, 40, 80, 160 and 200 units of insulin given on successive days without producing coma. On the eighth day, 250 units of insulin produced a satisfactory coma. The onset of this and subsequent comas was determined by the complete lack of a response to vigorous shaking other than a mild dilatation of the pupils of the eyes, the lack of the nasopalpebral reflex and a positive Babinski reflex. The patient had been deeply comatose for 21 minutes when peripheral electrical stimulation was started. Symptoms of arousal appeared gradually, after 13 minutes of stimulation; and after 18 minutes, the patient was able to answer questions, carry out requests and drink glucose solution. He was completely aware of his surroundings and the identity of the ward personnel.

The peripheral electrical stimulation was applied by placing 3x5″ saline-soaked, cloth-covered asbestos electrodes over the anteromedial aspect of each lower leg, attached by a Y connection to the negative outlet of a Reiter Model CW-47C Electrostimulator. A third electrode, 3½x10″, was placed over the lumbosacral

region and connected to the positive outlet. Current, provided from position I of the machine, was increased progressively to 20 milliamperes, with a gradual decrease governed by the patient's respiration and the vigor of clonic movements. As arousal began, the current was decreased with increasing rapidity as it has been found that less current is required to get the same responses late in stimulation, as is produced by larger amounts earlier.

In the second coma, peripheral stimulation was not started until 40 minutes after onset; and 31 minutes of stimulation were required to arouse the patient. The third day, 18 minutes of stimulation were required after 20 minutes of coma. The fourth day, 45 minutes of coma required 30 minutes of stimulation for arousal. After 25 minutes of the fifth coma, paroxysmal tachycardia was noted, with a pulse of 220; therefore, the coma was immediately terminated by intravenous glucose, and peripheral stimulation was not used. Likewise because of paroxysmal tachycardia, the sixth and seventh treatments were terminated with intravenous glucose in the cloudy excitement phase. The insulin dosage was then decreased to 150 units. Coma was not produced for three successive days at 150, 190 and 220 units respectively.

Coma next occurred with an increase to 240 units of insulin. In the writer's absence, this coma was interrupted after 30 minutes by a colleague, Dr. V. Balodis, who kept the current near 10 milliamperes for 45 minutes of stimulation. The coma noticeably lightened, but the patient did not quite awaken. Therefore, as an hour and 15 minutes of coma time had elapsed, prompt termination was accomplished by intravenous glucose.

In the subsequent 15 comas, produced by 220-270 units of insulin, no complications occurred, and peripheral electrical stimulation succeeded in arousing the patient in each instance. However, on three occasions, he became drowsy after drinking the glucose solution, so that after a 15-minute wait, intravenous glucose was given with prompt response. There was a variation in the length of stimulation required, from 10 to 31 minutes, and this appeared to be directly dependent upon the length of coma prior to stimulation. Most often, arousal was accompanied by a happy, elated state. However, with some of the longer comas and

stimulations, the patient appeared to be physically tired. Muscle soreness was noted only for the first three stimulations.

By March 1, 20 peripheral electrical stimulations and 17 hours and 52 minutes of deep coma had been completed. At that time the patient showed a weight loss of one pound. Although it had originally been intended to continue treatment until 50 coma hours had been reached, the improvement was so spectacular—beginning after the fourth peripheral electrical stimulation—it was thought advisable to stop further insulin treatment upon the completion of 20 stimulations, as the patient appeared to be completely well. The Funkenstein test on March 4, showed a moderate hypotensive response to mecholyl with prompt homeostasis and a 42-point rise in blood pressure to adrenalin, without anxiety.

On March 8, 1955, the patient received an occupational assignment in the hospital paint shop where he did very well. There was no further return of symptoms by June 17, when he was released into the custody of his wife and was to return to his previous occupation of sign painter. On September 21, he returned to the hospital for a follow-up examination and was discharged in consequence, as he was considered recovered.

Summary

1. A case is reported in which 20 hypoglycemic comas were terminated with the use of peripheral electrical stimulation.

2. The patient was fully aroused in 19 of the 20 trials so that he recognized ward personnel and drank glucose by mouth.

3. On one trial, intravenous glucose was required to restore the patient to consciousness.

4. In three of the 19 electrically-produced arousals, the patient relapsed into coma in spite of sugar by mouth, so that intravenous glucose was administered.

5. Treatment was terminated after 20 applications of peripheral electrical stimulation, as the patient appeared to be perfectly well. At that time, 17 hours and 52 minutes of hypoglycemic coma had been accomplished.

6. It appears that peripheral electrical stimulation may be more effective than glucose by mouth, in arousing patients from hypoglycemic coma, but less effective than intravenous glucose.

7. In addition to having therapeutic value in itself, peripheral electrical stimulation would appear to be worth while in patients treated by hypoglycemic coma who have very poor veins and for whom continued treatment might be hazardous.

8. Further study of peripheral electrical stimulation and hypoglycemic coma, as a combined treatment, appears indicated.

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PHYSICAL SYMPTOMS AS EQUIVALENTS OF THE DEPRESSIVE PHASE OF MANIC-DEPRESSIVE DISEASE

BY WILLIAM KARLINER, M.D.

Many patients believed to be suffering from various physical diseases are actually displaying only variants of a manic-depressive depression. Depressions can simulate almost any functional or organic illness.

Incomplete or mild forms of depression are more frequently seen by the general practitioner or non-psychiatric specialist than by the psychiatrist. The patients presenting them seldom complain of being depressed, and, if indirect questioning leads them to such an admission, they interpret their symptoms of depression as indicative of physical disease. These patients have insight, yet do not want to be considered mentally ill. They force their physical complaints into the foreground. Often a patient honestly believes his somatic condition to be the cause of his depression.

Gregory[1] mentioned that manic-depressive attacks or equivalents lasting only for hours or a few days are much more frequent than the manic-depressive episodes requiring hospitalization. Most persons having them are rarely seen by physicians, since the attacks are very short, may appear at long intervals, and respond to any simple remedy. Moreover, both the physician and the patient may focus attention on the accompanying somatic complaints.

As a group, these patients show cycloid personalities and give histories of one or more episodes which run a course and terminate in recovery. They have autonomic and somatic disturbances and often admit significant family histories. The autonomic symptoms are expressions of an underlying emotional disturbance. It is important to recognize these conditions, not only because they are self-limited, but also because all these patients are potentially suicidal.

Campbell[2] called manic-depressive psychosis "one of the most psychosomatic of all diseases." He reported a 32-year-old woman who for three years suffered from attacks of tachycardia, dyspnea, and weakness and tingling all over her body. Several thorough physical examinations failed to indicate an organic cause for her complaints. Her history revealed an episode of "nervous indiges-

tion" 11 years previously, during which time she had stayed in bed for a month. Eight years previously she had had an episode of "nervousness" of three months in duration. She received five electric shock treatments for her current "heart attacks"—with marked improvement.

Roth[3] also speaks of the "psychosomatic aspects of depression," referring to the manifestations of physical illness that arise from depression.

Karliner and Savitsky,[4] in discussing pseudoneurotic manic-depressive psychosis, mention physical diseases as equivalents of this disorder.

The writer now reports on 15 patients who presented themselves with a variety of symptoms for which no adequate organic pathology could be found. Their complaints included headeaches, insomnia, heart palpitation, shortness of breath, nausea and vomiting, abdominal discomfort, pains all over the body, and so on. Bouts of alcoholism, and periods of anorexia and fatigue—as well as circumscribed periods of apparent hypochondriasis—were seen as depressive equivalents. The onsets of these symptoms might or might not be related to any external upsetting psychologic situations. The episodes were usually self-limited and might recur, with the same or similar patterns throughout life. Occasionally, patients who suffer from a manic-depressive psychosis give a history of having had some self-limited episodes of "physical" sickness or hypochondriasis, which disappeared after a few weeks or months.

The following are abstracts of two case histories:

A 36-year-old woman was examined in 1952 because of multiple somatic complaints and cancerophobia of five months duration. She had had nausea and pain in the right side of her abdomen, pressing sensations in the head, and backache. She told of numbness of her face, which eventually affected her whole head. The onset of her complaints did not follow any psychic trauma or other extraordinary events. At a hospital a G.I. series, barium enema, chest x-rays, EKG and BMR were within normal limits.

Her history revealed that this patient had had similar episodes eight years before and three and a half years before respectively.

The neurological examination showed no evidence of focal organic disease of the nervous system. There was diminished sensation over the whole head, with involvement of vibration, ending at the neck, nondis-

sociated in character and apparently functional. Eight years before, when this patient was first seen, a diagnosis of psychoneurosis was made. However, the cyclic character, as well as the self-limitation, of these episodes suggests a manic-depressive equivalent. The patient's quick recovery corroborates this assumption.

A 37-year-old married woman was seen in 1947 because of nausea and vomiting of two weeks duration. A thorough physical examination, including a G.I. series, gallbladder series, barium enema and blood studies, was negative. Her condition became increasingly worse, since her vomiting led to the development of acidosis, and the patient had to be hospitalized. The history revealed that she had had a similar episode in 1941, which required hospitalization and parenteral feeding for about three months. The patient was given eight electric shock treatments for her gastro-intestinal complaints, with considerable improvement. In 1952, this patient had a severe episode of depression without somatic complaints. She again improved following six electric shock treatments.

Foster Kennedy[5] described a few patients with "manic-depressive equivalents" where the underlying moods of depression were denied and only somatic symptoms were expressed. One 32 year-old woman, who was referred to him with the diagnosis of "trigeminal neuralgia" said that she felt better in the evening, suggesting a diurnal rhythm of a manic-depressive constitution. She denied being depressed, but added, "With this pain, I don't feel very gay." Following three electric shock treatments, this patient recovered for eight months, following which she complained of "violent abdominal pain" for which no organic cause could be found. She had additional electric shock treatments, which again led to recovery. Another patient had been treated from time to time throughout her life for recurrent duodenal ulcer. When her depression ended, her symptoms disappeared.

Stengel[6] reported a 36-year-old woman who suffered from episodes of uncontrollable vomiting. These episodes were the equivalents of a depressive phase of a manic-depressive psychosis. This patient showed no evidence of depression during the spells of vomiting. She later developed a few manic episodes.

Summary

Fifteen patients with physical equivalents of the depressive phase of manic-depressive disease were observed. As a group, these patients showed cycloid personalities and gave histories of

one or more episodes which ran a course and terminated in recovery. Many of these patients were erroneously believed to be suffering from various physical diseases or from psychoneurosis. None of these patients admitted being depressed. Some of them had had previous episodes of depression; others developed depressions a few years after the episodes of self-limited physical disease. It is important to recognize these conditions, since all these patients are potentially suicidal.

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AFFECTIVE CASES AFTER PROLONGED HOSPITALIZATION*

BY MARIAN AXEL, M.D.

Since Kraepelin's[1,2] formulation of the concept, the problem of manic-depressive psychosis has remained one of the more obscure and poorly defined psychiatric topics. It has been attacked from many different angles, and defended from others, but despite the multidisciplinary approach and a host of often stimulating ideas, we are still today as far from a comprehensive, or at least plausible, answer to this problem as we were 50 or 40 years ago. We still do not know what makes a schizophrenic manic or what makes a manic schizophrenic, or if there are any real schizomanics or if it may be that both the schizophrenic and manic-depressive types of reaction are the changing facets of the same biological disorder.

This follow-up study with its limited goals and limited methods succeeds analogous clinical follow-up studies in this field—the papers of Lewis and Hubbard of 1931,[3] Hoch and Rachlin of 1941,[4] and Lewis and Piotrowski of 1954.[5] The present study was prompted by observation of a large group of chronic cases classified as manic-depressive psychosis on one of the services of Hudson River State Hospital in Poughkeepsie, N. Y.

Basically there are two points of view on the tangled relationships of the manic-depressive reaction type to schizophrenia. One is the popular belief that most affective cases after 10, 20 or 30 years of hospitalization "deteriorate" or "turn schizophrenic." The second point of view, represented explicitly or implicitly by all three of the follow-up studies just mentioned, is that the two entities are separate, do not mix or interchange and that the core of the problem is to make an early and correct diagnosis of schizophrenia. This point of view was expressed pointedly by Lewis and Piotrowski: ". . . even a trace of schizophrenia is schizophrenia."

Inasmuch as the "whys" remain obscure, and Rado's recommendation of "comprehensive dynamics of human behavior," integrating adaptational psychodynamics with physiology and genetics, is still a target of the future, there is in the meantime

*From Hudson River (N. Y.) State Hospital. Read in abbreviated form at the Syracuse upstate, interhospital conference, April 16, 1956.

an obvious need for more systematic and more detailed clinical observation, to be recorded, checked and compared. The aim of this paper is to present such clinical observations and interpret them afresh. Whereas the distribution of figures in this paper is strikingly similar to the figures obtained in one of the previous follow-up's (Lewis and Piotrowski) and some observations are at times repetitious (Hoch and Rachlin), other observations of the present writer seem to contradict the final conclusions of these authors and point toward a possibility of a different interpretation.

The group of 65 cases under consideration in this paper could be regarded as a typical sample of the so-called chronic affective group in an American state hospital. The group was chosen at random without any selection and without preconceived concepts to be proved or disproved. The youngest patient at the time of this writing was 40, and the oldest, 82; the average age of the group was 57. This was to be expected, considering the length of hospitalization, which was from four years to 47, with an average of 23. The patients come mostly from small towns, with a sprinkling from rural communities and larger cities. The families of all of them belong to low income brackets. Apart from two mentally defective cases (morons), the intelligence was average, borderline or slightly above average.

The study had, by necessity, to rely on available records, and clinical observation by this writer was limited to two years. Though information contained in some records was insufficient, inconclusive or even contradictory, in the majority of cases a fairly convincing and well-evidenced picture could have been obtained. Only a few of the cases were transfers; and most lived permanently at the Central Group Service of the hospital, which is called a semi-disturbed service and would correspond to a fairly comfortable, chronic female service found in most state hospitals.

The group of 65 cases was classified as: 39 diagnoses of manic-depressive psychosis, manic type; 15 of mixed type; eight of depressed type; two of stuporous type, and one diagnosis of manic-depressive psychosis with perplexity (Table 1.) The large number of cases in the manic subdivision and the small number in the depressed are noticeable. A possible explanation of those figures

Table 1. 65 Cases With Manic-Depressive Psychosis Classification on Admission

	No.
Manic type	39
Mixed type	15
Depressive type	8
Stuporous type	2
With perplexity	1
Total	65

Time of Hospitalization
Minimum — 4 years
Maximum — 47 years
Average — 23 years

will emerge in the course of discussion. The cases of stuporous type and the one with perplexity, diagnoses probably acceptable 20 or 30 years ago, would be classified today without any difficulty as catatonic schizophrenia, which all three of them proved to be when examined by this writer.

Before attempting an analysis of this group of cases, it should be useful to define the terms used in this paper, as they may differ slightly from conventional usage. The term "manic-depressive psychosis" is used strictly in its old Kraepelinian meaning and not as a generic term for all non-schizophrenic psychoses with so-called affective features. The term "mania" defines discontrolled behavior based on the mechanism of denial, whatever the combinations of changes in emotion, ideation and motor activity may be. The term "depression" defines discontrolled behavior based on the mechanism of compensation for unfulfilled dependency wishes, also with all possible combinations and gradations of changes in emotion, ideation and motor activity. The term "schizophrenia" or that of "schizophrenic type of reaction" is used as a generic term for the whole group of schizophrenias, denoting discontrolled behavior based on the mechanism of withdrawal from reality ("moving away from people"—Horney[6]) and characterized by specific and well-known symptomatology.

Consequently, the criteria for diagnosis in this study were more analytical than descriptive and were based always on a total evaluation of the personality and on consideration of the particular constellation of dynamics and symptoms involved. Stress was put on *the basic mechanism of defense* involved in each individual case. The final diagnosis was intentionally limited to two generic

categories of affective and schizophrenic types of reaction. The writer feels that the concepts per se of "deterioration," "regression," and duration of the disorder have no diagnostic value; and they were entirely by-passed in the diagnosis of schizophrenic type of reaction reported here.

The group studied were unselected patients living on one chronic service under the care of this writer. When evaluated two years ago, 23 cases proved to be overt schizophrenics. On further observation, two more groups were removed from the affective total. One could be called probable schizophrenics and consisted of three cases, and there was one mixed "schizo-affective" group consisting of seven cases. The three cases of probable schizophrenia—though the diagnosis was not changed officially—should be added to the 23 clear-cut cases, making a total of 26, or 40 per cent of the total group. The seven cases with mixed "schizo-affective" features will be discussed separately. (See Table 2.)

Table 2. Follow-up (1954-1955) of 65 Cases With Manic-Depressive Classification on Admission

Schizophrenia	No.	Per Cent
Overt cases	23	
Probable schizophrenics	3	40.0
Schizo-affectives	7	10.8
Affectives		
Manics (all basically depressed)	19	
Without traits	8	
Manic and senile features (one death)	4	
Senile features only	1	49.2
Total	65	100.0

If one now has a closer look at the group of 26 schizophrenics, who at one time were diagnosed as manic-depressive psychosis, two possibilities logically arise: (1) that the cases were diagnosed correctly and at some moment of hospitalization the type of reaction changed, or (2) that the primary diagnosis was for some reason defective and that the cases were schizophrenic all along. As simple as it appears to be, to make excerpts from a typewritten record or summary, the evaluation of the findings was most difficult at times—to avoid bias or a critical attitude. Nevertheless, it was felt that in 22 of the 26 cases in question, the diagnosis of manic-depressive psychosis was poorly motivated; and the diagnosis of schizophrenia could have been made on admission on a more

careful evaluation. It is interesting to note that in only three cases the schizophrenic features were by-passed in the record without any relevant explanation. In 19 cases they were observed, described and even at times discussed at length; and still the diagnosis of schizophrenia was not made. This was probably due to acceptance of the Kraepelinian division into deteriorating and benign psychosis. Whatever was not deteriorating or not outright dissociated was not schizophrenic. The final decision to make the diagnosis of manic-depressive psychosis was motivated very often by "good contact," "quick improvement," "clear sensorium," "good insight," "reactive features" and similar terms. Such an observation was also made by Hoch and Rachlin[4] and stressed by Hoch in the discussion of his paper. The writer feels that very often withdrawal was mistaken for depression and catatonic excitement for mania. Bonner and Kent[7] stressed in their paper the difficulty of such differentiations. A typical example of the latter error may be the case of manic-depressive classification, in which a schizoid girl—one of the writer's group—was diagnosed in 1920 as manic because of "violence and destructiveness in a clouded sensorium." More enigmatic was the diagnosis of mania in a stuporous girl because of "depression and perplexity." Despite the enormous progress we have made in the last 20 years or so in the diagnosis of schizophrenia, we should be lenient. Maybe in another 50 years, our present refined diagnosis will sound as confounded and enigmatic.

The fact remains that in the group of 26 schizophrenias, there were 22 cases which were probably schizophrenic all along and should be eliminated from the affective or mixed cases. This leaves only four cases (6.15 per cent of the 65) in this group which on admission had no schizophrenic features, were apparently correctly diagnosed as manic-depressive psychosis, and are at this moment undoubtedly schizophrenic. Though this is a very small group, the common variables, like body build, personality, age, color, were taken under consideration. None of these seemed to lead to a common denominator. Most of them proved unreliable and deceptive, but opinion is withheld because of the small number of cases. As there is also nothing typical to be found in the case histories about the dates of the changes of reaction—some became schizophrenic after five years, some after 20 or longer—this writer

feels that new factors should be investigated. There was no clear-cut evidence, but it was highly suggestive from the available material that living with schizophrenics on a chronic ward and the possibility of imitation or mass withdrawal might be a variable worth checking. The limited time of direct observation precluded an investigation of this factor. It must be mentioned that in all four cases which turned from an affective to a schizophrenic type of reaction, the heredity was "strongly positive," both in ascending and collateral lines. One case was three plus; two, two plus; and one, at least one plus. There was no mention of the type of mental disorder in the family. Again opinion is withheld because of the small number of cases.

In the group of the schizo-affective type of reaction, consisting of seven cases, six were classified on admission as manic-depressive psychosis with schizoid features, or the notion was expressed otherwise directly or indirectly that this was a mixed type of psychosis. Two cases, with series of admissions, were diagnosed on some admissions as schizophrenic types of reaction and on others as affective types of reaction. Analogous observations were made by Hoch and Rachlin. The reasons for discussing this particular group separately are the still-persisting mixed features of these cases. It is impossible to diagnose them as affective or schizophrenic unless one accepts the existence of a schizo-affective psychosis. This is a controversial and most interesting subject.

Kasanin[8] in 1933 coined the name "schizo-affective" for a group of cases characterized by acute beginnings and mixed, but specific for this group, symptomatology. The term schizo-affective later became used more loosely and acquired a new meaning. Some authors believe that such a classification is only an expedient covering up our difficulty in separating the two types of reaction, and that most of the so-called schizo-affective cases are basically schizophrenic and divulge sooner or later clear-cut schizophrenic pictures. Other authors accept the existence of a schizo-affective group, without committing themselves as to the cause, outcome or basic mechanism involved in this type of case. The fact of the intermingling of affective and schizophrenic features was elaborated in a consistent way by Meduna, who believes that the manic-depressive psychosis and schizophrenia are only different manifestations of the same biological disorder. This point of view

is shared today by an increasing number of psychiatrists. It is expressed succinctly by Bellak,[9,10] who says, "I think that manic-depressive psychosis lies on a continuum of ego strength, at the end of which lie the most pronounced schizophrenic disorders, while at the positive end of the continuum lies the normal state with such variations of consciousness, perception and reality testing as arise in dreams, anxiety, toxic states, febrile disorders, etc." In other words, Bellak believes that there is rather a difference of degree but no clear-cut dichotomy between those two types of psychotic reaction.

The hypothesis of continuity of psychotic reaction types received support recently from experiments with artificial or so-called model psychoses, provoked by the injection of certain drugs like LSD or mescaline or other chemicals. Though the whole subject is still fluid and under investigation, it can be concluded from the growing amount of experimental studies on LSD (Sandoz bulletins), that a given amount of LSD under given experimental conditions may cause a schizophrenia-like type of reaction at one time and an affective-like type of reaction at another time. Though some authors have observed that the type of reaction depends on the subject's pre-experimental type of personality and that the drug only brings to the surface, or at times even caricatures, the subject's latent tendencies (Hoch and others*), other observations (Becker*) seem to indicate in *normal,* healthy subjects a routine type of response of mixed character, akin to the clinical picture of schizo-mania.

The seventh case in this group, which the writer would like to summarize briefly, confirms the situation of fluidity and contradicts our out-dated faith in semantics. This is the case of D. G., white, married woman, 53 years of age, with about 21 years of total hospitalization. There was no reliable information on her infancy or childhood, apart from a statement that she was "delicate at birth" and "very bright at school." Her personality make-up as a young adolescent was apparently hysterical. At 15, on the first day of her last school term, she became excited and stayed two weeks at Presbyterian Hospital, "depressed and apprehensive." In 1918, at 16 years of age, she became fearful and excited again, apparently because of her first menstruation. The

*Cited in Sandoz bulletins.

same year, she was hospitalized at Central Islip State Hospital and the diagnosis of manic-depressive psychosis, circular type, was made. There is no description of her symptoms. She was discharged after four months as recovered.

Following this episode, the patient had four admissions of from one year to three years duration, in 1922, 1929 and 1935, always with a typical affective, mostly manic, symptomatology. Her diagnoses were manic-depressive psychosis, manic or mixed type. She was hospitalized for the sixth time in 1942 at Brooklyn State Hospital and classified again as manic-depressive psychosis, manic type. There she had metrazol treatment, but without any lasting benefit. She was transferred in 1943 to Hudson River State Hospital, and the diagnosis was maintained. During the following years, her behavior was characterized by outbursts of excitement and aggressiveness, with fairly comfortable periods in between.

Around 1946 or 1947, she started withdrawing, and the ups and downs disappeared. She was hallucinating, had delusions of being raped and had other delusions of sexual content of rather bizarre character. She displayed a fairly systematized paranoid trend; she was often disturbed and in a camisole. As one of the nurses recalls, she seemed "to go down hill like the others." It is not quite evident from the record when the schizophrenic episode of at least two to three years duration started clearing up; but when this writer interviewed D. G. in 1954, she was in good contact, pleasant, without hallucinations and in a manic frenzy of working off excitement. She had no paranoid ideas any longer, and her occasional delusions were of topical character. The circularity of ups and downs had returned. On a re-check about the end of 1955, she presented the same manic picture and there was no trace of habit or intellectual deterioration. Though this case presents obvious diagnostic difficulties, and the affective label makes the writer uneasy, there is not enough evidence to classify it as circular schizophrenia. As far as the clinical observation goes, this is a fairly typical and not so rare, case of changing types of reaction, the manic type of reaction yielding to the schizophrenic type of reaction and the schizophrenic type of reaction giving way to a return of the manic type. Malamud and Linderman[11] first described five analogous cases of interchanging types of reaction.

The "undiagnosed" group of the six cases with mixed features which has been discussed offers two diagnostic possibilities. Disregarding such semantic plays on words as affective psychosis with schizophrenic features, or schizophrenia with affective features, one can diagnose those cases simply as (1) early cases of schizophrenia or as (2) genuine mixed cases of a schizo-affective disorder, on the borderline of a continuum between the two types of reaction. The fact that those six cases were already described as mixed on admission and did not progress into overt schizophrenia, preserving for from 17 to 28 years their mixed clinical features, speaks in favor of the second classification. The possibility of a continuum is so enticing and looks superficially so much like an oversimplification, that some psychiatrists reject the idea a priori, as a regression to the old concept of one psychosis, and refuse to discuss it seriously. Both genetic and physiological findings are cited today to prove the existence of a single type of constitutional schizophrenic stigma, with one genotype, one phenotype (schizotype), one set of autonomic responses and one clearly defined psychological reaction type. It might seem that the situation in reality might be more complicated, as suggested by Bleuler,[11,12] who accepted the existence of more than one schizophrenia. As much as the present writer disagrees with Bleuler's concept of a primary thought disturbance, which the writer believes secondary to the displacement of affect, other pertinent opinions of Bleuler should be recalled in this context, for the sake of fairness and scientific accuracy. One of them expresses clearly Bleuler's belief in mixed psychoses. "As already mentioned, there are no sharp limits against schizophrenia and there exist mixed psychoses, which by their nature stand between the classic manic-depressive insanity and schizophrenia." In another paragraph of his textbook he accepts the possibility that a mixture of manic-depressive and schizophrenic symptoms might be "a genic entity with symptoms of both forms." If Bleuler had an open mind on this subject, why should we limit ourselves today to one line of investigation and one narrow concept, merely to foster the hypothesis of organic impairment, which obviously would not suffer in the least by enlarging the area of research.

Deducting the 26 schizophrenics and seven mixed cases from the 65 in the present study leaves 32, that is, slightly less than half

(49.2 per cent) of the total group in the so-called affective group. The symptomatology in this last group is at this time so diverse that their only common links are their manic-depressive label and the lack of schizophrenic features. The analysis of the subgroups in this affective half is interesting. Nineteen cases with manic diagnoses remained manic, two of them after 42 and 47 years of hospitalization respectively. Among these 19 cases, two are mentally defective, a fact which did not influence the typical course of reaction. Two of the 19 were markedly regressed, and one of these two showed habit and mental deterioration. The latter had had 24 and the other 42 years of hospitalization. The fact that so-called manic-depressive cases may show regression, deterioration and symptoms otherwise met in schizophrenia was stressed by Lange in his comprehensive survey as early as 1922.[13]

Five cases with manic diagnoses lost their manic traits completely. As they do not belong to any one age group and the length of hospitalization is not uniform, all that can be said is that some cases lose their manic traits completely after prolonged hospitalization. Also, all three cases with depressive diagnoses were found without depressive traits, self-contained and self-contented, placid and passively adjusted. Three cases with manic diagnoses showed mixed senile and manic features and one, a woman of 82, showed only senile features.

One may now consider the manic group which still has overt manic features to be the only relatively pure group with analyzable variables. It is accepted as a well-known clinical fact that there are many more manias and depressions than the six subgroups described by Kraepelin. This is stressed by Lewin[14] who does not elaborate, however, on the less frequent types, as he is preoccupied mostly with elation, euphoria, ecstasy, rapture and all the states of fusion of the ego and super-ego he has analyzed so instructively. It will be remembered that the six Kraepelinian subgroups are: maniacal stupor, agitated depression, unproductive mania, depressive mania, depression with flight and akinetic mania. Some concepts, like agitated depression, have found general acceptance and are fairly well understood. The present writer has found unproductive mania relatively rare among his cases. Maniacal stupor seems to him to be related closely to akinetic mania, and depressive mania to be related to depression

with flight. The last two categories are suggestive of the correlation between mania and depression which is elaborated later in this paper. The writer thinks that every psychiatrist who has seen enough affective cases could come up with another set of arbitrary groupings and that there are as many possibilities of new names as there are mathematically possible permutations. If he can avoid committing the sin he preaches against, the writer would like to mention the frequency of just one combination of symptoms met rather frequently among cases of this group. The picture is that of a sulky, practically emotionless, immobile patient, talking very rapidly, and most intent to talk away as fast as possible and as far as possible the obvious underlying anxiety. Schematically, one would have here no psychomotor excitement, slight depression and a colossal upsurge of ideation.

On the subject of so-called akinetic mania, Hoch and Rachlin[4] declared in their paper: "All akinetic manias are schizophrenias." The present writer's case material seems to contradict this statement. Many patients with episodes of so-called akinetic mania, or even maniacal stupor, were still nonschizophrenic after 20 and more years.

In this respect, the case of Flora may be instructive. This happily-married, 57-year-old, intelligent Jewish woman presented a typical example of a cyclothymic type of personality, displaying all her life clear-cut ups and downs, and for the four years preceding this writing being in and out of the hospital at least once or twice a year. She was the nearest to the classical picture of a manic-depressive psychosis among the cases of this study, though the dynamics were involved and some exogenous factors always played a role in her periodic breakdowns and near-psychotic spells of depression or mania. Her over-all emotional response was and still is within the normal range, and not a single symptom to give rise to suspicion of schizophrenia was ever detected or surmised clinically, or indicated on Rorschach examination. On several occasions when she was hospitalized because of manic excitement, the writer has watched her gaze most intently at a spot of light or at an unusually bright object or a body of water for fairly long periods. Also for the rest of the day on which such an incident occurred, she would remain mute, aloof, automatically changing postures, unwilling to talk, although she

was always in good and immediate contact when approached. She would stay in such a state for days; the longest period observed was five. During one of her gazing episodes—when it was obvious from the expression of her eyes and a hardly detectable quiver around her mouth that she was far from being catatonic and that her mind must have been working feverishly but in a mood of contention—the writer asked her gently, "Flora, what are you thinking about?" There was a long pause; and then, without moving her head, she started talking rapidly in a kind of whisper: "I look . . . I am all eyes and I am happy . . . Isn't it wonderful . . . oh, I know . . . you want to know what I am thinking . . . so many things . . the thoughts are flowing without effort, like clouds on the sky . . . [pause]. I am happy with my thoughts . . . people are . . . you know how they are . . . it is the only time when I am with myself . . . no movement, just my thoughts . . . [pause]. I see myself . . . my life . . . one thing tumbling over the other . . . wind scatters the leaves . . . am I a leaf? . . . it is an awful havoc . . . but somehow it makes wonderful sense . . . now it dissolves . . . just the dancing spot of light . . . [pause] . . . it dissolved . . . oh, I feel happy and warm . . . white . . . light white . . . a sea of happiness . . . white or dark . . . it changes all the time . . . it's probably blue, yes, deep blue . . . immense . . . [long pause]. Is that happiness? . . . what is happiness? . . . you are sweet to listen to my nonsense . . ." Flora's daydreaming would be hardly worth reporting—apart from the obvious references to the "oceanic feeling," "nirvana of light" or the "blank dream" concept, if it were not for the particular setting in which it occurred. There was no movement, practically no visible emotion—but the inner flight of ideas. For all practical purposes, Flora could have been diagnosed catatonic, and in fact was considered "obviously catatonic" by several nurses and physicians. When asked on one of her normal days how it feels to be in "a gaze" she said "That's my escape. [The patient was receiving psychotherapy off and on, and loved "deep" interpretations.] What do you make of it? Am I running away from myself . . . or am I so much in love with myself? I do not know. I cannot start it . . . it comes by itself. Suddenly. It is all very difficult to explain. Why I don't move . . . elementary Doctor Watson . . . it is much easier to think . . . you know, to be on the beam . . . when you don't have to bother how many legs you

have . . ." Flora, who is now on thorazine, apparently responds well to it, and is continued on a maintenance dose when at home, does not have any more episodes of akinetic mania. She is more placid than formerly, and all her borderline episodes are now of depressive character.

From time to time, several other patients displayed episodes of akinetic maniacal states similar to those of Flora, but possibly less dramatic and less fluently verbalized. In each instance, there was no stupor, but rather a flight inward, with complete freezing of psychomotor activity. An episode often started by a patient's looking at a window, at a bright spot or a geometrical pattern. Such an incident would last at least a few minutes and might last longer, if the patient was not disturbed. When the patients were asked about their trends of thought, there was found much preoccupation with death, nirvana-type longings and, in two cases, clear-cut ideas of re-birth. The frequency of such ideation in cases of stupor reaction was stressed by August Hoch[15] in his discussion of benign stupor. When observing such akinetic episodes closely, one may have at times, the impression of a hysterical flight or of self-hypnosis. The frequency of their occurrence would speak against the former, and the vivid mentation against the latter. Also one should not be misled by analytical concepts of mania (happy state of fusion) and interpret the serenity as elation. There are no thinking disorders, but there is a distorted, dreamlike but logical trend of thought, centering more often around Thanatos than Eros. Such episodes seem to correspond to August Hoch's "absorbed manic states." Dynamically they are, the writer thinks—despite their superficial similarity to catatonia—well within the realm of mania and denial. The lack of thinking disorders or ambivalence, the intensity of affect, and the quality of the withdrawal, which does not constitute the dominant basic mechanism of defense, are suggestive of a nonschizophrenic type of reaction.

It is a striking fact that in this group of 32 affective cases, not a single one fitted the classical concept of manic-depressive psychosis, that is of a psychosis with self-contained, alternating manic and depressive, attacks, a psychosis due exclusively to endogenous factors and never leading to regression or deterioration. This supports Lewis' observation[5] that real manic-depressive psy-

chosis is extremely rare in state hospitals and in its pure form is more likely to be found rather in private practice.

Another clinical observation seemed worth checking. Though many agree that there is no such being as a happy manic and that the underlying mood is that of depression, others follow the classic psychoanalytic line of Abraham, Freud and Rado, conceiving mania as a state of bliss when the bad ego is fused with the good super-ego in "faithful, intrapsychic repetition of the experience of that fusing with the mother that takes place during nursing at her breast" (Rado).[16]

Elsewhere[17, 18] Rado elaborated on his basic concept: "... elation is a developmental derivative, a morbid counterpart of a basic human experience—the infant's intoxicating satiation at the mother's breast." Fitting into his concept of miscarried repair, he sees mania as the achievement of "a spurious pleasure." Lewin[14] developed his concept of mania on similar lines: "The happy mood of the manic, therefore is a repetition. It is subjectively valid and real to the one who experiences it, because it relives a primary real, happy feeling. In the actual content of ideas of manics, besides the experience at the breast, are included the later events of childhood, which themselves in some way repeat or revive the nursing situation, or may themselves have been falsified by it."

The present writer's clinical observation, confirmed by many hours spent in listening to and observing manics, seems to indicate that they are all, without exception, basically depressed and anxiety ridden—to an extent excluding an otherwise psychoanalytically logically-postulated state of bliss or exaltation. As noted by Lewin,[14] elation is not the only mood in mania, and many shadings of the mood are observed, like rapture, haze, dreaminess, flippancy and even simple garrulousness which do not correspond to a state of bliss. It is agreed that whatever the mood is, it is a screen affect. Following the trend of thought of Deutsch[17-19] and Lewin, the importance of denial as the basic defense mechanism in mania is impressive. On continuous observation and further re-checking of the records, the writer has found all his manics extremely childish and immature. It seems natural for such characters to use denial, the most primitive and unstructured mechanism of defense. The outright depressed patients with-

out any manic episodes were found somewhat less childish. Also their defense mechanisms, much more structured and complicated, did not allow the sudden changes so frequently seen in manics.

In the case material of this study, the writer has not seen the type of chronic optimist described by Angel,[20] where there is a suffusion of the whole personality by the mechanism of denial. Worry and depression were just underneath in practically all of the present cases. Some patients expressed it spontaneously in remarks like: "I am sometimes worried, that's why I'm cheerful." Others had to be closely observed for hours, others for weeks or months; but, unfailingly, the traumatic material came up sooner or later with crying spells, depression, and, at times, fairly dramatic breakdowns. However, these patients very quickly recovered their artificial balances. Often, two or three days of the writer's absence from the service were enough for him to find these shattered patients on his return as manic and "cheerful" as before. In two cases only, sodium amytal was needed to remove the mask of apparent euphoria. The question arises: Are we entitled to speak of a manic type of reaction? Or have we just depressed patients with a depressive reaction type, the most immature of them recurring to a primitive, unstable mechanism of defense—denial, fitting well their childish character and childish wishes?

The general feeling of uneasiness about the pigeonholing of all possible mood disorders under the old Kraepelinian heading of manic-depressive psychosis found expression in the introduction of a new classification under the heading of "psychotic depressive reaction."[19] Though the heading is purely descriptive, the classification seems indicative of present-day discontent with the state of affairs. The writer feels that the clinical observations of this study indicate the need of acceptance of this one or a similar entity, which can be understood dynamically, in purely psychological terms, and is also clinically unrelated to the relatively rare endogenous manic-depressive psychosis. One of the more interesting observations of this study seems to confirm Lange's view[20] that affective cases can regress and/or deteriorate, and the outcome is not always benign. Why some affective cases deteriorate and others don't, we do not know. What we have learned, however, the writer believes, is that such deterioration does not automatically spell schizophrenia.

The ebbs and tides of psychiatry might evoke, on glancing back, a feeling of uneasiness, but are in fact the expression of continuous searching and a welcome sign of evolution by mutations. As we know, mutations may be advantageous, disadvantageous, or indifferent. The writer does not think that we could include, in the advantageous group, concepts connecting one particular mechanism of defense—like regression, dissociation or so-called deterioration—with one particular entity, or could so include related ideas, holding a single factor responsible for any specific mental pathology, a short cut in vogue in our "chemical" era. Fortunately, only advantageous mutations with survival value become fixed and transmitted.

Summary

1. Sixty-five patients in the manic-depressive psychosis classification were investigated after an average of 23 years of hospitalization, and observed systematically for over two years. About one-half (49.2 per cent) of the cases in this group did not show any schizophrenic features in this follow-up. The other half (50.8 per cent) was found to be partly schizophrenic (40 per cent of the whole) and partly schizo-affective (10.8 per cent).

2. Most of the cases displaying a schizophrenic type of reaction on this follow-up were apparently misdiagnosed on admission (33.8 per cent of the total of 65), and only a small group of four cases (6.15 per cent) seemingly became schizophrenic during hospitalization. Because of the small number of cases, the latter group is not acceptable as a basis for discussion. Part of the cases which did not show a schizophrenic type of reaction in the follow-up had preserved their affective features and benign character, part had deteriorated or regressed, and part had lost their traits in a passive, burned-out adjustment. The group of schizo-affective cases is discussed separately, and the opinion is expressed that they should be accepted, not as early or latent cases of schizophrenia, but as genuine instances of a schizo-affective disorder, a point on the continuum between the schizophrenic and affective types of reaction. One case history illustrating the interchanging of schizophrenic and affective types of reactions is presented.

3. Mania and manic behavior are discussed and are considered

to be a screen affect in basically-depressed and very immature individuals who are prone to use the mechanism of denial as their main defense. Prevailing psychoanalytic concepts of manic behavior are questioned by the present writer. The suggestion is made that the concept of a manic type of reaction be disposed of, and that all affective cases not corresponding to Kraepelin's endogenous entity be classified simply as depressive psychosis. The latter need not necessarily have a benign character.

4. The "continuum hypothesis" originated by Meduna and elaborated by Bellak is felt to be a possible answer to the confusion about the relationship of so-called affective disorders to schizophrenia. The continuum hypothesis sets forth the possibility that the two types of reaction are only the changing facets of the same biological disorder, and that there is rather a difference of degree between them than a clear-cut dichotomy. The present writer feels that the schizo-affective type of reaction lies midway on the continuum and is understandable only within such a concept.

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A PSYCHIATRIC STUDY OF THE MOTHERS OF EXCESSIVELY CRYING INFANTS*

BY I. HYMAN WEILAND, M.D., ALLAN R. LEIDER, M.D., AND CHARLES A. MANGHAM, M.D.

The treatment of excessive crying has long been of concern to the pediatrician and has received attention in the pediatric literature.[1-4] Recent psychiatric papers stress the importance of the interplay of psychologic activity between infant and mother as a contributory factor.[5-8] Several authors suggest that the attitudes of mothers of excessively crying infants** are responsible in some way for inappropriate handling of the infant.[5, 6, 8] Thus Spitz[6] describes "primary anxious over-permissiveness" as the emotional state in the mother that is productive of crying. Stewart, et al.[5] describe the mother of a crying infant as one who in some way stimulates the infant excessively or fails to provide adequate means for the reduction of tension arising in the infant.

Crying is described by these authors as the result of: "tension which arose internally [in the infant] from unsatisfied needs or from inappropriate external stimulation. . . . The quantity of this tension was affected by the parents' behavior as it related to the satisfaction of the infant's needs . . . The parents of babies who cried excessively responded inappropriately and inconsistently to their infants' needs with over-stimulation or with relative neglect [or both]."

Since the handling of the infant is so important in determining whether he will cry excessively, it is necessary to look to the personalities of the mothers to determine what there is that leads them to behave toward their infants so as to cause excessive crying. This study will attempt to shed some light on the question

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**"Crying" and "excessive crying" will be used synonymously in this paper unless otherwise stated. Excessive crying (colic) was defined in a previous paper.

of what psychodynamic factors lead to behavior provocative of the excessive tension that leads to crying.*

The mothers in this project were studied in psychiatric interviews and with projective tests to gain some appreciation of their personality structures, and to obtain information about interpersonal relationships in the family, especially the mother's relationship with the infant. All the mothers were followed for the first six months of the infant's life or longer and, in addition to the information gained by interview techniques, their behavior in the home and in the clinic was observed by other members of the project personnel than the interviewer.** Of the families studied, only five are presented—with the purpose of showing some of the kinds of personalities encountered. After the birth of a baby, the mother was seen each week until the infant was six weeks old, every two weeks until three months of age, and monthly thereafter. The fathers were interviewed at least once, for additional information on the questions investigated. All but one of the subjects were married to full-time students at the University of Washington.

Although, as mentioned before, five cases were selected to demonstrate certain kinds of personalities encountered in mothers of crying infants, no attempt was made, nor is any implied, to give priority to any personality factor that commonly could be pathognomic in producing excessive crying. The group studied in the total project is too small for such an analysis. It may, however, be possible to make some generalizations on the basis of these five cases, which will stand in the nature of hypotheses to be tested by subsequent investigations.

Observations

Case A

Mrs. A., aged 25, has an infant daughter. Mrs. A., married to a passive, ineffectual husband, has expressed fears that men will dominate her. She has had an urgent need to take leadership in making financial and academic plans in her own home, and

*For these purposes, tension will arbitrarily be defined as the result of homeostatic imbalance, whether caused by lack of satisfaction or by relief of some physiologic need or by external forces.

**Personnel in the project included psychiatrists, pediatricians, public health nurses, psychologists, medical social workers and laboratory technicians.

has found household activities distasteful. Before the birth of her baby, she enjoyed her work outside the home and tended to avoid "woman talk" which she said dissatisfied and annoyed her. After the birth of the baby, Mrs. A. complained that she was tied down in the home and could find nothing but the baby to talk about. Even though the pregnancy was unplanned, was unwanted and interfered with her husband's academic program, Mrs. A. alternately spoke of having more children in rapid succession (knowing that these would interfere further) and of having no more children (rationalizing that then her husband could complete his education). She did not bring up the question of Mr. A.'s education when she spoke of having more children.

Mrs. A. expressed numerous fears about the baby, such as that she would be ill, would not get enough food, or that she was in pain. She could "feel the pain" as much as the baby. In response to these preoccupations, Mrs. A. would over-react by feeding and handling the baby too much. On other occasions, she seemed to neglect the infant openly.

In addition to being concerned that the baby would not receive adequate care, Mrs. A. expressed equally great concern that she herself would not be able to care for her. She feared that she would not have enough milk, feared that the baby's demands would deplete her beyond endurance, or that the baby would bite her nipples if breast-fed too long. There were a number of dreams of being unable to feed the infant or of having an inadequate supply of milk.

Comment. This mother's hostility toward her infant is very thinly veiled and at times seems almost conscious. The sources appear to be two-fold: On the one hand, the baby robs her of her chance to compete with men, and on the other, demands more of her than her limited capacity to give can tolerate. She turns the first fear and problem to her own advantage in some respects by using the infant and her anticipated future children to carry out her competitiveness with her husband—through interfering with his pursuit of vocational goals. This merely serves to augment her ambivalence about having and rearing children, and thus the baby is both loved and hated. She is valued as a "tool" for the expression of competitive hostility toward the husband, and

at the same time is resented because she interferes with the mother's desire to compete more openly in the masculine world.

These affects are translated into action toward the infant as follows: At times, the hostility is directly acted out in neglect. When guilt about this nearly overt expression becomes too great, Mrs. A develops reactions against it, becoming overtly attentive. Excessive attention to the baby is also motivated by Mrs. A.'s overvaluing her as a means of competition with her husband. In the same manner, Mrs. A. acts out, and overreacts to, her hostility to the infant because of demands which she feels she cannot meet. Her fear of the infant and the defensive reaction of hostility are further augumented by her fear of the infant's oral aggressiveness, which could be a projection of her own impulses. (See for example, her excessive fear about the infant biting her nipples.)

Case B

Mrs. B., 24, *has a baby boy.* Mrs. B. was introduced to the study project after becoming a patient of one of the authors (C.A.M.). She was forced into psychotherapy by her family, because of a number of check forgeries, because of being a parasitic drain on her family, having marital difficulties and engaging in sexual promiscuity. She had refused to assume most responsibilities, forcing others to carry them. Her seductions of men were invariably followed by attacks on, and depreciations of, them. She had always been "conscious of wanting to be a boy," wore slacks most of the time and felt uncomfortable in women's clothing. She consciously hated and envied men and at the same time was seductive and promiscuous. Her only known satisfying heterosexual relationship had been with a man 30 years her senior who gave her many gifts and supported her financially.

Mrs. B. had two older children, toward whom she showed open rejection and hostility. When she learned that she was pregnant with the infant who is a subject in this study, she consciously hated being pregnant and was resentful that the child would be the offspring of her despised husband. After the birth of the baby she still resented him and resented having to care for him, just as she had resented caring for her husband, whom she characterized as infantile and demanding. She would neglect the infant and ignore his cries. She would permit her seven-year-old son

to feed him, or would attend to his needs mechanically and without any show of interest. She would expose him to danger by leaving him unattended on a bench in the doctor's office, or by leaving him in the care of the older son and the daughter, aged four. Although aware of, and somewhat concerned about, her lack of adequacy as a mother, Mrs. B. was rarely able to make any effort to change. Her only means of attempting to better her care of the baby was to feed him excessively.

This woman's behavior toward her infant was similar to her own mother's behavior toward her. Mrs. B.'s mother was described as rejecting and as failing to follow through on her promises of aid. This was substantiated by her mother's failure to pay for Mrs. B.'s medical expenses, as she had promised to do; and this was merely one of many such episodes.

Comment. Mrs. B., an obviously dependent person, is unable to obtain satisfaction of her needs for dependency from her mother, so turns to men for such satisfaction. To gain this satisfaction, she uses her sexual charms, and as soon as the man makes demands upon her, the balance is upset and she reacts with violent rage. This is augmented by her competitive hostility toward men. The demands become further increased when she becomes pregnant. Mrs. B.'s need to avoid complete satisfaction of her desires in her "sugar daddy" relationships with men indicates some probable guilt over the very relationships she wants.

This mother directly acts out her hostility to her infant because of his demands on her limited capacity to give, because he is the representation of her paramours' demands and because he is a constant reminder that she is an inferior and "unloved" woman. Identification with her mother further contributes to Mrs. B.'s hostility toward her own child. She does not have the capacity to develop adequate repressive or sublimatory defenses against her acting out, nor is she able to identify with the child and, by giving to the infant, satisfy her own needs through the identification.

Case C

Mrs. C., aged 28, has an infant boy. Competition with men and boys is evident throughout childhood and adolescence in Mrs. C.'s tomboy behavior and in her interest in working on the farm, "doing the work of a hired hand [a man]," with her father. As

an adult, though she did not indulge in masculine activity, she disliked housework to the point of shifting much of this responsibility onto her husband. She was not able to achieve full sexual pleasure and avoided tender love-making with her husband after her marriage. Mrs. C. recalled that when she was a child an uncle took great pleasure in tickling her until she cried. In spite of the crying, Mrs. C. said that she had repeatedly returned to this uncle to be tickled.

Pregnancy, except for the final weeks, was marked by a sense of well-being and a desire to exhibit the pregnancy. She had hardly been able to wait for her abdomen to show. She could imagine having only a male child and picked a name for a boy only. During the pregnancy, Mrs. C. was concerned that her baby's limbs would "not be all there," that "his" ears would be too large like her own father's ears, "which stuck out from his forehead—I mean his head." Mrs. C. became very embarrassed when this slip was pointed out. Her next comment was that girls could cover up their ears but boys could not. Both before and after the birth, Mrs. C. was concerned about the child's circumcision. She was exceedingly proud of her baby's large hands and feet.

In her handling of the baby, much stimulating activity was seen. He was held whenever he stirred or awoke. Mrs. C. indulged in frequent and excessive jiggling and fondling. Often she would place the infant stretched out in her lap—head pointing away from her—and stroke his sides vigorously to and fro with her hands. It is to be noted that the boy's name was "Pat." She was aware of her pleasure in handling the baby, and when she stopped this excessive handling, on the pediatrician's suggestion, she felt deprived and within a few days developed a severe low back pain.

Frequently Mrs. C. would hold or play with the baby even when she knew he was hungry. When she did feed him she would stroke his lips with the nipple or pull the nipple out in an effort to get the baby to suck more vigorously though he was sucking entirely adequately, as determined by the pediatrician's observation.

Comment. Mrs. C. during childhood partly renounced her feminine sexual strivings and early turned to a goal of achieving masculine status. Her ambivalence kept drawing her back to the

feminine sexual situation (e.g., the tickling episodes), and in adulthood she made a partly satisfactory feminine adjustment.

In her lack of acceptance of household responsibilities and shifting them onto her husband, and in her open dislike of many feminine activities, Mrs. C. showed her inability to accept the feminine role fully. The pregnancy was an extremely exhibitionistic situation in which she could "show" her achievement and from which she obtained great pleasure. Mrs. C.'s conviction that the infant would be a boy, and her preoccupation with protuberances suggest that unconsciously she equated fetus and penis. Her need to handle the infant excessively and her pleasure from this handling further corroborates this hypothesis. Thus her handling of the infant seems, in part, to be a masturbation equivalent.

It is also conceivable that the mother's concern about and preoccupation with castration fantasies of the fetus and infant can represent her competitive rivalry with men and her fear of a male infant. Thus it can be postulated that part of the mother's excessive need to do for the infant grows out of guilt over her competitive hostility to him and her castration wishes toward him.

Case D

Mrs. D., aged 25, *has a boy baby, and twin girl babies* 14 *months younger.* This mother's first child, cried excessively but the twin girls showed no more than moderate crying, well within the limits of normal.

Mrs. D. demanded a great deal of attention, approval and affection from her husband, mother, pediatrician and public health nurse. She objected to the role of mother, not so much because of dislike of feminine activities, but rather because she was left "alone" in the house. She wished to be able to go to college, like younger women of her acquaintance, and as she had gone herself before the birth of her first child. After his birth she had not gone back to school but had worked away from home for the time when he was two months to 14 months old.

Mrs. D. was, as an adult and as a child, in rivalry with her siblings (all male), both in respect to their masculine successes and in regard to the esteem and attention they received from their mother. In respect to the former, she wished her husband

to do as well as her brothers; and in respect to the latter, she merely expressed envy. As a child she emulated the brothers' behavior by becoming a tomboy. Although competitive rivalry was recognized by Mrs. D., she could not remember being resentful of either brother. She had sucked her thumb until she was 17, had bitten her nails and was rather overweight in adolescence, and had shown a tendency toward obesity all her life.

Mrs. D. was more or less solely responsible for the care of the first child during the first two months of his life. Then she worked, sharing his care with a sitter, but retaining most of the responsibility. Mrs. D. expressed numerous fears for the infant's well-being and for her own ability to care for him. At the same time she complained at some length of having had to care for the child alone, and of not being able to get out and be with people.

The twins, born when the boy was 14 months old, were not the objects of excessive fears, and, while caring for them, Mrs. D. did not make the complaints which she had voiced with the older boy. At this time, Mrs. D. was able to get more assistance in caring for the children from her husband, her mother, her pediatrician and the public health nurse. In large part, the attention was given because Mrs. D. had three children under 14 months of age. A great deal of attention, oversolicitousness and unnecessary handling had occurred with the older boy. When the twins were born, the mother's behavior changed. She gave them much less attention than she had to the boy when he was an infant, and shared their care with two other persons. Mrs. D often neglected to feed the first baby when he appeared hungry, or fed him inadequately. At other times she would tease him with the nipple.

Comment. This case poses not only the problem of why this mother produced excessive crying in her baby boy, but also why she has avoided doing it with the twins.

Mrs. D.'s relationship with the first child was influenced by her own dependent needs. Not only did she have to give to this infant more than she felt able to; but as a result of his birth she lost many opportunities to satisfy her own needs. After his birth, she was unable to continue in school and thus lost the relationship she had had with her classmates and teachers. She was also unable to maintain with her friends and neighbors,

similar relationships which had served to satisfy her needs for acceptance by peer groups and parent surrogates. The hostility precipitated by this conflict could not be accepted, and Mrs. D. was forced to over-react and overcompensate by excessive concern for, and activity with, the baby.

Some of the overprotectiveness grew out of guilt arising from competitiveness with a male infant. This could have been forecast from the fact that there was a good bit of rivalry with men in Mrs. D.'s life, in addition to her dependent strivings.

There are a number of ameliorating factors relating to her feelings about, and handling of, the twins. They are girls and arouse less envious feelings, and, therefore, less guilt and less need to over-react. Also, Mrs. D. not only receives much more assistance in the handling of the twins but also receives a good bit of attention for herself, which, by increasing her own security, allows her to give with less ambivalence to the infants.

Case E

Mrs. E., is 24. *Her baby is a girl.* This mother was a patient of one of the authors. She was seen for three hours because of a mild postpartum depression, but declined further treatment. Incidental to her discussion of her present illness, she described the problem of excessive crying by her infant daughter.

Mrs. E.'s behavior with her daughter was outstanding in the amount of attention paid to keeping the baby clean. She was preoccupied with the need to change diapers frequently. In addition, there was a need to adhere to a rather rigid schedule, especially for feeding.

Mrs. E. was a very meticulous woman who in her pre-morbid personality laid great emphasis on scheduled behavior and had numerous obsessive thoughts and compulsive symptoms.

Comment: Mrs. E.'s infant is subjected to the excessive stimulation growing out of the mother's intense preoccupation with, and fear of, dirt, and her need to maintain excessively high standards of cleanliness. In addition, the feeding schedule, although one to meet the mother's rigid needs for meticulous adherence to routine, does not necessarily meet the child's needs for nourishment at the time that his needs are present.

Discussion

The purpose of this study is to investigate factors in the personalities of mothers which lead them to handle their infants in a way to produce excessive crying. In the subjects studied, some of the personality problems are common to more than one individual. It is doubtful that the presence of one or more such problems is directly related to the production of the baby's crying, since the particular problems noted are rather common, not only in the project population,* but also in the general population. The level of personality integration achieved by the mother at the time of the infant's birth, together with the meaning of the infant to the mother, is crucial. In the case of excessive crying, the infant's significance is such as to intensify conflicts previously present in the mother. Not only must the infant arouse certain emotional conflicts for such crying to be the result; but the mother must react to the infant and to her own feelings in such a way as to satisfy the infant's needs inadequately.**

The various reactions which the five different mothers had to their babies can be briefly summarized as follows: Mrs. B. directly acts out neglect and hostility to her infant because he interferes with her plans and desires, whereas Mrs. A. acts out much less overtly and, in addition, develops a need to give and do excessively for the baby, as a reaction to her guilt. In addition, Mrs. A. uses the same mechanism of reaction formation to compensate for the guilt arising out of hostility to the infant, because of his interference with her masculine, competitive strivings. Mrs. D. demonstrates the reaction of a mother who is so dependent she has difficulty in giving to her infant. She acts out by neglecting the infant, and shows hostility when demands are made on her. Because of her guilt, she, too, reacts with excessive care for the infant. Also contributory, is the infant's interference with her need to compete with men.

Mrs. C., although demonstrating some dependent rivalry problems, reacts with stimulating behavior to her infant—because of her unconscious fantasy of him as a phallic extension of herself. Mrs. E. has a severe obsessional personality and neurosis,

*Selected from veterans' student housing community.

**See description of maternal behavior, on page 508.

with the resulting need to retain rigid schedules, which cannot, because of their rigidity, meet the infant's needs completely. In addition, her marked need for cleanliness causes excessive manipulation of the infant to keep him clean.

Of the five mothers four clearly demonstrate problems about the acceptance of their roles as women. This is seen both in relation to the babies and in the daily life-experiences of the women. They clearly view femininity as a deprived, masochistic, inferior state. The fifth subject (Mrs. E.) was not adequately studied in terms of this problem.

To these women, the very fact of giving birth to babies was an affirmation of those very feminine roles they both feared and could not accept fully. To both Mrs. A. and Mrs. D. the infants came to signify a definite handicap in the need to compete with men. Mrs. C., too, felt this, but compensated by reacting to the fetus, and subsequently to the infant, as a phallic extension of herself. In this way, she gained the masculine status that she could no longer obtain by competition.

Another significant motive for hostility and reactions of hostility on the part of the mothers toward their infants was the presence of rather marked rivalry for dependency in many, if not most of, the mothers. It certainly cannot be stated on the basis of such a small study whether both motives need be present. It was observed that the neglecting or inconsistent behavior, or both, toward the infant could be seen as a result of one or the other conflict.

Their infants represented many different things to the five mothers studied and conceivably could represent many other things to other mothers who might be studied. Also, in the case of one mother (Mrs. D.), at different times in her life, under change of circumstance, and with a change in the sex of the child, the significance changed considerably.

Any infant makes demands on any mother's ability to give; and to some degree, it arouses rivalry in feelings of dependency, or ambivalent feelings, or both, growing out of the mother's attitude toward the sex of the child. Also, any infant, by the nature of the amount of care that he requires, interferes with the pursuit of many activities that parents would like to carry out. However,

if the amount of gratification that the infant offers can overshadow the amount of discomfort that he causes, or if the discomforts are not significant enough to the mother to interfere with handling the infant, the mother may be able to meet the infant's needs adequately, without the production of excessive discomfort in the infant.

In conclusion, it is probable that crying can result from behavior by the mother, arising from one of several sources. Guilt resulting from hostility toward the infant—a hostility which may appear for any one of a number of reasons—can motivate the mother to react so as to cause excessive stimulation and/or inadequate satisfaction of the baby's needs. It is not simply the presence of the guilt or hostility which makes for excessive crying in the infant, rather it is the intensity of the feelings, the conflict over them, and the mother's reaction to this conflict that is responsible. Also, a more direct acting out of hostility toward the infant can obviously interfere with the satisfaction of his needs. Severe enough anxiety about handling him, whatever its source, can lead to inadequate or inconsistent satisfaction of the infant's needs. Finally, any mother who handles her infant excessively because of a desire for erotic gratification may stimulate her child and produce discomfort. The opposite—the woman who handles her child insufficiently because she fears erotic gratification—may thus neglect her child, fail to meet his needs and produce excessive crying.

Summary

Descriptions of the personalities of five mothers (of seven infants) are presented to show the factors in their personalities which bear upon the production of excessive crying by babies. Five different, though overlapping, patterns of personality are seen. Conflicts in one or more areas of psychosexual development were seen in the various mothers. The nature of the conflicts was not the significant feature. The important factor was the defense against the conflict itself or against the anxiety growing out of it—particularly as it related to the infant. No single maternal personality pattern or factor was found to be specific for the production of excessive crying in infants.

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THE PATTERNS OF SCHIZOPHRENIA IN ADOLESCENCE*

A Report on 50 Cases of Adolescent Girls

BY ALEXANDRA SYMONDS, M.D., AND MORRIS HERMAN, M.D.

In an attempt to clarify the picture of schizophrenia in adolescence, a detailed study has been made of 50 cases of schizophrenic girls between 12 and 18. Although adolescence is an important period for the onset of schizophrenia, there have been few comprehensive studies of the problem in the literature. In 1943, Neubauer and Steinert stated, "No comprehensive research in the nature of schizophrenia in adolescence has been published. The question as to whether or not an individual who becomes schizophrenic in adolescence is manifesting a disease that had been lurking within the personality since childhood, or earlier, should not forever remain a matter of conjecture but should rather be subjected to clinical scrutiny."

The problems urgently needing investigation are many—such as diagnostic criteria, clinical pictures, incidence, prognosis, and treatment. The existing lack of clarity is in part caused by the special factors created by adolescence; and these are yet to be adequately defined. Many authors, including Slight, Neubauer and Steinert, Cameron, Warren, and Keiser, have recognized that the evaluation of schizophrenia in adolescents is especially difficult because of the large number of deviant patterns seen in "normal" adolescents. The following is a preliminary report on a study now in progress.

Material

The psychiatric wards for adolescents at Bellevue Hospital, New York City, have been used in this study. Only female adolescents are reported on here. A large number of adolescent patients are received in the psychiatric hospital of Bellevue and the staff has established fairly uniform criteria in making the diagnosis of schizophrenia, therefore providing an ample source of material. The girls' ward receives adolescent girls from the ages of 12 to 18. They may be referred by physicians, the courts, social agencies, or schools, or may come directly from their homes. The patients for this study were accepted in sequence, starting

*From the psychiatric division of Bellevue Hospital, New York, N.Y.

in November 1954. They totaled 50 girls with schizophrenia. The group included girls on the disturbed wards and on the surgical and medical wards of the Psychiatric Division. The evaluation of each adolescent at Bellevue is made by several psychiatrists over a period of two to four weeks; and, in most instances, a psychological battery is part of the examination.

More patients have been studied, but this is a preliminary report on one phase of the observations. During the five months of the study, 127 adolescent girls were examined; and 50, or 39 per cent, were diagnosed as schizophrenic.

Intelligence

The intelligence level ranged from defective to bright normal (See Table 1). There was no essential difference between the range of intelligence in this group and that for all patients on the adolescent wards.

Table 1. Intelligence Quotient Distribution*

Defective (below 65)	7
Borderline (66-79)	10
Dull normal (80-90)	11
Average (91-110)	18
Bright normal (111-119)	2
Superior (120-127)	0
Not known	2
	50

*Wechsler Bellevue.

Age Range

Ages ranged (See Table 2) from 12 through 17; 43 girls, or 86 per cent, were 14 or older. This is approximately the distribution of the population of adolescents in the whole psychiatric hospital.

Presenting Symptoms

The presenting symptoms causing admission to Bellevue were: bizarre or withdrawn behavior including delusions or hallucinations (18 patients), suicidal attempts or preoccupation with suicide (12), persistent aggressiveness in school or at home (10), and running or wandering away from home (4). The remaining

six were admitted because of prostitution, kidnaping, attempted homicide, and anorexia.

Table 2. Age Distribution.

Age	On Present Admission	Schizophrenia Diagnosed	Onset of Psychosis	Noticeable Disturbances*
1			1	1
2				
3				
4				
5				
6			1	1
7		1		
8				
9				
10			1	3
11		2	1	1
12	3	4	5	7
13	4	5	3	5
14	16	14	10	6
15	7	5	5	4
16	11	11	6	5
17	9	8	3	1
Life			10	13
Not known			4	3

*Disturbances of any kind as reported by family or community.

Histories and Clinical Pictures

In studying the personal histories of these patients, a basis for grouping emerged which seems to give insight into the natural course and development of schizophrenia in adolescence. Three distinct types could be identified.

TYPE I

The first group consists of girls who had made an adequate adjustment in life and showed serious disturbances only with the onset of the schizophrenic illness. Fifteen girls were in this group. The histories obtained from the parents were usually, "She was fine until last week," or, "We can't understand it—she never had any trouble." These girls were in school, showed no marked deviation in growth or development; and no important personality abnormalities could be elicited in their histories. The characteristic clinical picture was an acutely psychotic state with hallucina-

tions and profuse delusions, with a sharp demarcation between illness and health. Some of the girls recovered rapidly and were discharged to their homes; others had a more persistent illness. Examples follow:

S. H. is a 14-year-old girl who was described by her family as an "average," likable child who presented no problems at home or in school. Two months before hospital admission she began to be extremely frightened and refused to leave the house or go to school. She felt that people were following her and feared that someone would stab her. She heard a voice telling her to do strange things such as "break glass." When she closed her eyes she imagined herself on a log approaching a buzz saw.

The electro-encephalogram was normal, and her IQ was dull normal (Wechsler-Bellevue).

She refused to go home, begging to be allowed to stay in the hospital. She was committed to a state hospital.

L. G. is a 16-year-old whose childhood presented no serious problems. Four months before admission to Bellevue she had come to New York from another city to attend college. She was brought into the hospital by her father because, for the preceding six weeks, she had had the feeling that her teachers were "against" her and wanted to harm her. She had auditory hallucinations; a voice kept repeating a phrase accusing her of something. On examination, she was evasive, confabulatory, depressed, delusional, was hallucinating and had an inappropriate, flat affect.

She was committed to a state hospital and was discharged from there in remission four months later.

TYPE II

The second group consists of 24 girls whose histories indicate many serious personality and behavior problems in childhood. Agencies or families have been preoccupied with the problems these children presented, usually for many years. Their pre-psychotic disturbances included childhood behavior problems, neurotic symptoms, and intellectual retardation. Truanting, fighting, stealing, running away from home, frequent tantrums, aggression, sexual promiscuity, were common behavior patterns. Less common, were hypochondriacal, phobic, and autistic manifestations. Six of this group developed acute psychotic states with

delusions and hallucinations. Eighteen showed gradual development of schizophrenic psychoses. The exact points of onset were vague because of the slowness of development of symptoms and also because it is natural for these adolescents to be secretive with adults concerning intimate personal feelings. This latter fact frequently led to the finding of a more severe state of illness than could be expected from the history given by the families. Examples are:

I. A. is a 12-year-old girl who had been in an institution since the age of two when she was abandoned by her parents. Although she was always known to have a quick, violent temper, she was not considered a serious behavior problem until two years before her admission to Bellevue. From that time, however, her behavior became increasingly aggressive. Her foster mother had brought her to the hospital because of continuous fighting and because of threatening to kill her foster mother and sister who were now afraid to have her in the house with them. The child felt that "everybody picks on me since the day I was born." Other girls talked about her, she said, and spread nasty stories. She was hostile and guarded and stated, "If I had a knife I'd kill my foster mother." Her affect was inappropriate and she had hallucinations of bears and lions killing people. She was comparatively bright and alert, with an IQ of 90. She was placed, from Bellevue, in an institution for normal girls, but after two days she became disturbed and screamed for a girl with whom she had a homosexual relationship. She said she really feels like a boy. She was returned to Bellevue and certified for further hospitalization.

T. T. is 14. She has been known to social agencies since the age of 11 when she was first brought to their attention for promiscuous sexual activities. She was always difficult in school; she was reported to have uncontrolled behavior, wandering around the building; and she displayed severe impulsive aggressiveness. On examination, she was sullen, negative, provocative, suspicious, and preoccupied with aggression. Her thinking was confused. She felt that people talked behind her back, stared at her, and were trying to harm her. She made no effort to control her impulses and could not be maintained except on the disturbed ward. Her IQ was 80.

TYPE III

The third group is made up of 11 girls who have long histories from infancy or early childhood of bizarre behavior and developmental deviations indicating childhood schizophrenia. As children, they were known as "strange" or "never like the other children." In only three cases had diagnoses of childhood schizophrenia already been established by earlier psychiatric contact. Typical examples are:

C. H., is 17. She has a long history of disturbance, truancy, deviant behavior, lying, and so on—from early childhood. She walked, talked and was toilet-trained before one year. When she was one, her mother was hospitalized for rheumatic fever. For six weeks, the child was in a "shelter." When her mother returned, she did not walk, talk, or control her bowels. She remained constantly immobile with hands close to her body; kept silent, and had lost interest in her surroundings. Two years later, she regained her ability to walk and talk, and was again toilet-trained. In childhood and early adolescence, she was distant and moody. She was loud and boisterous with friends, but secretive. C. H. was admitted to Bellevue from Girls Term Court for staying away from home and being unmanageable. The onset of her acute symptoms was uncertain but was probably about three months before admission. She was a tall, well-developed girl, but was confused, had a fixed affect, stared at the wall, and speech was tangential, with pressure, and she had intense ideas of reference, "They say I was put away for having a baby." She was frightened, suspicious, and constantly fighting with the girls on the ward because of her delusions. Her IQ was 87. She was committed to a state hospital.

J. S. also 17, was admitted to the hospital from the home of her aunt, who stated that she was always "different" from other children. The onset of her symptoms was vague, and there was a history of lifetime disturbance. She was considered mentally retarded, her judgment was always poor; and, after her mother died, she became more disturbed, hitch-hiking, roaming about the country, and staying away from home. Recently she had developed delusions, felt that her aunt had been trying to poison her. She became preoccupied with sex, and threatened suicide. The aunt thought she was "mentally ill." On the ward, she was immature,

evasive, confused, agitated, constantly stopping doctors, and clinging to them. She showed sexual confusion and had had some homosexual experiences. Her verbal IQ was 79.

Discussion

It is noteworthy that the three groups of schizophrenic illness described not only show different life histories but also special features diagnostically, prognostically and therapeutically. Patients of the first group, who were relatively well until their acute episodes, usually provide no problems diagnostically since their symptoms are commonly massive and abrupt. The prognosis of this group is by far the most hopeful (Cameron, Paterson), and several of the group studied here recovered while in Bellevue. Patients who have shown evidence of significant achievement before the acute episode, are usually more suitable than are most for intensive psychotherapy once the acute disturbance has subsided.

Members of the second group, characterized by behavior disorders, or severe neurotic symptoms before their psychotic breakdowns, are persons who were struggling for many years to maintain themselves. As children they went through various phases of disturbance before ultimately developing psychotic symptoms. The pre-psychotic personalities of these girls displayed unusually persistent, intense, and prolonged disturbances. This is one of the important diagnostic points. For example, two girls were preoccupied sexually, including having intercourse as early as eight years, several had histories in childhood of assaulting and threatening people with weapons, and two girls made numerous suicide attempts from early childhood. All showed a crescendo of behavior disturbance a few months before the appearance of the psychotic picture.

This group is one of the most difficult to diagnose. Only six of the 24 had acute, frank psychoses with delusions and hallucinations. Seven of the group had no delusions or hallucinations. It is likely that, within this second group there are distinct types but the size of the groups is not large enough to be conclusive. These children very often preserve excellent affect and sufficient shrewdness to withhold early, or deny, their most significant psychotic symptoms, thus making diagnosis even more uncertain.

Keiser described a typical example of this group—a girl who was hospitalized four times in a year on the same ward before the psychotic symptoms were clearly identified.

Therapy and prognosis are relevant to the underlying personality structure. That is, a girl who shows a long-standing pattern of aggressive behavior, with a recent psychotic episode, will continue to have essentially the same difficulties as a non-psychotic girl with a behavior disorder, once the psychotic symptoms subside. The entrenched nature of the personality distortions presents serious resistances to a favorable prognosis. Although these girls often talk readily and seem superficially responsive to psychotherapy, they are best treated in a carefully supervised atmosphere, because of their need to act out in a destructive manner. Another important clinical observation is that mistakes in management can readily be made in this group because these girls are relatively intact in social personality areas. These patients may restrain their behavior or disguise their symptoms for short periods to achieve an objective, such as discharge from a hospital. It is important to make certain that the destructive impulses are really in check before embarking on therapy away from a supervised atmosphere such as that which a hospital provides.

The third group, made up of girls who were childhood schizophrenics, did not in most cases change significantly for eight to 10 years before hospital admission, but were brought to the hospital either because their families were afraid that they were becoming sexually active with the advent of adolescence, or because of involvement with the courts. The diagnosis here is usually not difficult, providing one is guided by the clinical symptoms of childhood schizophrenia as described by Lauretta Bender. Thus one sees evidence of development lags, mutism in childhood, bizarre play habits, withdrawn or autistic behavior, hallucinations, delusions, rituals, and confused sexual identification. By the time they reach adolescence, these children show evidence of chronic illness, sometimes with deterioration. These girls seem particularly susceptible to sexual relationships in adolescence, of a type which grows out of the "clinging" seen in the childhood phase of schizophrenia. The identity of the partner seems unimportant if there is an opportunity for the girl to remain physically close to him and feel protected. It is apparent that there is no

depth to such a relationship but rather a primitive anxiety when separation is threatened. Sometimes homosexual relationships rather than heterosexual ones, will develop. The therapeutic approach to this group is very different from that to any other. These children require help in their special disabilities. Their disorganized motility, their complete lack of sexual identification, their perceptual motor defects, and other features have handicapped them for many years. The therapeutic goals are much more limited for this group than the others.

Summary

A survey is presented of the patterns of schizophrenia seen in adolescent girls. A preliminary study of 50 cases indicates that there are three types based on differences in pre-psychotic development. Each group has special features in diagnosis, prognosis, and treatment.

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ESSAY ON THE ORIGIN AND EVOLUTION OF NEUROPATHOLOGY*

Some Fundamental Neuropathologic Contributions to Psychiatry

BY L. ROIZIN, M.D.

For a better understanding of neuropathology it is necessary to evaluate first the characteristic structural and functional interrelationship of the nervous system, of which it represents the disharmony, alteration and eventual disintegration. Furthermore, neuropathology, like other biologic and other scientific disciplines related to medicine, has passed through various transitional phases in its evolution. Therefore, for clearer visualization of the significance and role of neuropathology in the study of nervous and mental diseases, this review will begin with its origin as judged from a review of the pertinent literature.

In the *Data of Ethics*, Herbert Spencer emphasizes that each science begins by accumulating observations and facts, followed by deductive interpretation and "when empirical generalizations are substituted with rational generalizations thus it becomes developed science." However, to visualize properly the achievements of the past, one must remember that "each worker is dependent on the thought of his time, utilizes formulations suggested by others, is stimulated by special interests and inspired by particular circumstances of his own era" (Campbell).

In view of such considerations, and guided by the thoughts of the distinguished men who have recorded and evaluated the progress of the medical sciences, a brief review will be given of the historical background of the essays in discussion.

Literature of Ancient Civilizations, and Other Biblical and Religious Records (3000 to 1000 B.C.)

Paleopathology** shows almost synchronously with the first manifestations of life on earth, undoubted evidences of disease. Although such evidences are necessarily limited to fossilized

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**Klebs, A. C.: See bibliography.

bony lesions, it appears that diseases were and are the inseparable companions of life (Garrison).

Inasmuch as the primary interest in this discussion is in mental disorders, and to simplify the review, the principal psychiatric concepts will be taken up first and discussion of the correlated neuropathologic aspects will follow.

Psychiatric Aspects. Although no very definite description of mental diseases appears in the literature of Sumer, Babylonia and Assyria (from 3000 B.C. on,*) illness was ascribed (2600 B.C.**) to demons in the earth, air and water; and undoubtedly mental disorders were among those so accounted for. More definite are the accounts found in the ancient epics, or legends (which represent condensations of fantasy or fact) describing instances of temporary as well as fatal mental disorders. In Shoa (Ethiopia), epileptic reactions, deliria and hysteria were attributed to demoniacal possessions. In Mongolia, people suffering from catatonic states were considered to be possessed by Damchan (devils).

In the famous Ebers Papyrus (1550 B.C.†), mental disorders and their dependence on the action of evil spirits are mentioned; senile deterioration and alcoholic reactions are also described.

The *Fragments of Ayur-Veda* (1400 B.C.), an ancient system of medicine in India, revealed the first classification of mental disorders, which were supposed variations of demoniacal possession (five angers of devils), one anger of the gods (Devtas) and one anger of the spirit of dead men (Petrigriha).

An early reference to mental disorder in the Bible (Deut. 28. 28) declares: "The Lord shall smite thee with madness, blindness and astonishment of heart." The Biblical accounts also reveal Saul's recurrent attacks of melancholia and mania, terminating in his suicide (1097-1058 B.C.) (Lewis).

Neuropathologic Aspects. Cranial injuries inflicted purposely, with the death of the victim intended, appear indicative that the brain was recognized, at least, as an essential vital organ. A king of Egypt (circa 3000 B.C.) was described as a "smasher of

*Childe, V. Gordon: New Light on the Most Ancient East. Grove Press. New York. 1957.

**This date is taken from Nolan D. C. Lewis (see bibliography); other authors differ as to the earliest records of these specific medical concepts.

†Lewis.

foreheads."* The Papyrus of Edwin Smith contains references to traumatic lesions of the skull and its contents. Babylonians and Assyrians held similar ideas: The god Marduk (as described in the Babylonian epic *Enuma elish*) is spoken of as stepping upon the legs of Tilamat and splitting her skull "with his unsparing club." Marduk is credited also with the destruction of the storm god Zu, whose skull was also crushed.

The ancient Hebrews developed well-defined concepts regarding the serious consequences of cranial injuries. The Israelites, like the nations around them, wore helmets for warfare. The Old Testament also mentions the lethal effects of cranial injury. For instance, Jael (in the period when Israel was ruled by judges**) slew the fugitive Caananitish general, Sisera, as he slept, by driving a tent spike through his "temples." The death of Goliath (circa 1050 B.C.) might be attributed to brain concussion inflicted by David's well-calculated marksmanship (Courville).

As far as the structural organization of the brain is concerned, it was considered to be "the marrow of the head" (Edwin Smith Papyrus) or as being composed of the same substance as bone marrow (Hoang-Ti of China).

Early Greek Mythology and History (Previous to Hippocratic Period, 1000-600 B.C.)

Psychiatric Aspects. Accounts of episodes of frenzy and demon-produced madness are frequent in Greek mythology. The Greek dramatists refer to insanity as "the ancient wrath." Hera, Zeus' wife and Queen of Heaven, was notorious for her power to produce insanity. She demonstrated this power on Althamas, Ino, and Dionysus; because of her anger at Herakles, he became subject to attacks of madness in addition to his epilepsy—which was known through the ages as the "disease of Herakles." In Homer and in accounts by Herodotus, are many references to mental disorders or madness of legendary persons and heroes. Hallucina-

*The practice of slaying wounded and incapacitated soldiers left on the battlefield is illustrated in the *National Geographic Magazine*, 80: 438, 1941.

**The age of this tale is doubtful, but it is certainly one of the oldest in the Bible. *Courville* (*The Ancestry of Neuropathology*) gives 1300 B. C. but does not cite his authority; many modern scholars would prefer a century or two later—according to the date assigned to the Exodus, which cannot yet be fixed within four or five centuries.

tions were assumed to be phantasms or specters communicating with a person.

Neuropathologic Aspects. In the *Odyssey* and *Iliad,* references are made as to the significance of the skull and brain injuries in both humans and animals. Odysseus' Acheans disabled the Cyclops during his sleep by driving a sharpened bar of olive wood into his eye. One of Nestor's horses during the siege of Troy was injured by Paris' arrow in the vertex of the skull, as a result of which he started hopping like a rabbit and fell to the ground. The brain was described as "soft and wet"—wet by cerebral spinal fluid.

Hellenic Golden Age and Roman Period (580 B.C.—476 A.D.)

Psychiatric Aspects. During the Hellenic Golden Age, which claimed among other illustrious men, Socrates (469-391 B.C.), Plato (429-347 B.C.), and Aristotle (348-322 B.C.), dominance of the philosopher-physician became the most significant trend (Castiglioni).

While Plato considered that mental disorders could arise from either bodily or moral disturbances, his pupil, Aristotle, emphasized the importance of the mind in terms of the whole organism, recognized mania and melancholia, described mental characteristics of epileptics, and pointed out the difference between acquired and congenital diseases. However, the most celebrated physician of this period was the legendary Hippocrates (460-370 B.C.) who considered heat, cold, moisture and dryness, with their various combinations and distortions, to be the natural causes of diseases. He classified mental disorders into phrenitis, mania and melancholia. He was the first to emphasize predisposition and heredity in relation to mental disorders.

Abundant information on the mentally ill was accumulated by Asclepiades (fl. 124 B.C.) referred to as the "father of psychiatry." He noted differences among hallucinations, delusions and illusions. Almost at the same time, Cicero (106-43 B.C.) insisted on differentiating true insanity from imbecility.

A few decades later, religious ideas began to show their influence. Galen (130-210 A.D.) and his period signified a new trend in development. Galen chose to classify the mental disorders into the physical and the emotional, and originated the concept by

analogy between the microcosm (as man) and macrocosm (as universe) which dominated medieval medicine.

Neuropathologic Aspects. Although during the early part of this era, Pythagoras (580-489 B.C.) had been the first Greek philosopher to consider the brain to be the central organ of intellectual activity and mental diseases, Hippocrates was in doubt later as to the actual structure of the brain. He believed that it might be a gland like other glands, and that it excreted fluids for distribution to various parts of the body. A retention of these fluids in the brain* (which he recognized as the organ of intelligence and sensation) produced apoplexy, epilepsy and delirium. Hippocrates also believed that injuries to the head were fundamental causes of motor and sensory disorders, a matter masterfully described in his celebrated *De Vulneribus Capitis.* In addition to any pathological situation in the "humors" the behavior of the individual was thought to suffer when the brain was the seat of some actual lesion.

It is also worth mentioning that during this period of time, animal vivisection and human dissection were practised. These procedures led to the founding of comparative anatomy and embryology (Aristotle), early systemic neuro-anatomy (Herophilus, 335-280 B.C.) and the beginning of experimental neurology (Galen).

Middle Ages (A.D. 476-1300)

Between the fall of the Roman Empire (476) and the early part of the 11th century which is considered as the era of retrogression or the Middle Ages, the early development of Christianity produced an amalgamation of medicine with religion, which contributed to the revival of primitive theories of demonology, worldwide witchcraft and supernatural phenomena (See biblography, Dampier-Whetham). From about A.D. 500 to about 1300, the Middle East and Arabian physicians in general dominated the scene of medicine, as they founded and organized hospitals, scientific institutions, libraries and academies of learning in many cities. Among those which gained fame are Alexandria, Baghdad, Cairo, Cordova, and Damascus (Jelliffe).

*It is interesting to note, that during this era the concept of "humoral pathology" was established and that it dominated all medical fields for over 2,000 years, until Virchow set forth the "cellular doctorine" (1858).

Physicians known for their knowledge of mental disorders included Aetius of Amida, Mesopotamia (527-565). He described three types of phrenitis which depended upon the involvement of memory, reason and imagination, and were also distinguished according to their location in the anterior, middle or posterior parts of the brain respectively. Alexander Trallianus of Lydia (525-605), taking issue with Galen, placed sensibility in the anterior part of the brain. He also described manic-depressive psychoses. Rhazes (850-923), the "Galen of the Arabs" and one of the great clinicians of all time, observed mental disorder as chief physician of a great Baghdad hospital which had a service for the mentally ill. Avicenna (980-1073), a genius in all branches of science, was an adherent of Aristotle and a philosopher whose doctrines are believed to have inspired Roger Bacon. He opposed demonology explanations and sought the source of melancholia in the stomach, liver and spleen.

Renaissance and Reformation Periods (1300-1800)

Psychiatric Aspects. During the years from 1300 to 1500, psychiatry did not keep pace with the brilliant revival of arts and culture; witches, alchemy and the signs of the zodiac determined the diagnosis and treatment of mental diseases. Of particular historical importance is the building of hospitals for mental patients and epileptics (Bethlehem, London, 1247; St. Valentine at Rash in Alsace, 1486; San Hipolito, Mexico, 1566).

During the period of the Reformation, or for about a century and a half after 1500, the outstanding productivity in intellectual works stimulated the revitalization and progress of psychiatric concepts. Psychiatric achievements included the concept that psychic causes may determine mental disorders (Paracelsus, 1493-1564); the classification of mental diseases, according to acquired, congenital and hereditary types (Plater, 1536-1614); the first definite clinical description of general paresis (Willis, 1621-1675), and of hysteria (Sydenham, father of clinical medicine, 1624-1689). At this time, the view was developed that mental disorder was a pathological condition of the mind within the individual (i.e., endogenous) and not some force entering from without. (Consequently, its expressions should be considered in the light of psychological functions.)

Neuropathologic Aspects. The correlative basic sciences also made enormous progress through the outstanding contributions of research men who pioneered in, or laid the foundation of, cerebral anatomy and comparative neurology (Vesalius, 1514-1564, *De Fabrica Humanis Corporis*, 1543; Plater, 1536-1564; Wepfer, 1620-1695; Stahl, 1660-1734; and others). Many structures of general anatomical and special neurological, and some of psychiatric significance were described and discovered (Eustachius, Sylvius, Fallopius, Varolius, Gall). These findings initiated a better understanding of brain structure and function, which became the basis for new physiological concepts, besides paving the way toward the development of comparative and abnormal psychology (von Haller, 1708-1777; Cullen, 1712-1790; Gall, 1758-1828) (See bibliography, Garrison).

During this era of brilliant intellectual productivity, very important scientific reforms were introduced. Galileo (1564-1642) founded the modern scientific method. Francis Bacon (1561-1626), the father of empiric scientific procedure, formulated the inductive laws of scientific discovery; he advocated replacing faith (theological concepts) and beliefs (metaphysical explanations) with doubt and inquiry, and urged the student to utilize his senses and his reasoning powers in observations and experiments.

In addition, Descartes (1596-1650) introduced fundamental doctrines, which have fervent supporters even in our present time. In his *Meditations*, he discussed the brain as the organ of sensation, thought and emotion, and considered it an organ integrating the function of mind and body. He further differentiated matter and spirit (the dualistic doctrine); defining the former as "extended substance" and the latter as "thinking substance." He explained the material world and its processes in mechanical terms (the mechanistic theory) and held that mathematics was the tool for investigating physical sciences and that the method of psychology (the science of mind) was introspection or self-observation of the events of consciousness (Holdane). These doctrines have influenced all science remarkably, including medicine and psychiatry. Finally, toward the end of this most exuberant period (1500-1800) of medical and general scientific progress, Morgagni (1682-1771) accumulated and classified a tremendous amount of gross pathological material (including lesions of the

brain) in honor of which he has been called "father of pathological anatomy."* Cruveilhier (1791-1874) is considered the father of neuropathology as he wrote a more complete work on this subject, published from 1829 to 1835.

Modern Trends or the Era of Scientific Experimentation and Methodology (1800 to the Present Time)

From 1800 onward, medicine, along with other sciences, began to free itself from the ancient authorities, traditions and religious overtones and opened a new road for unprejudiced investigation and scientific experimentation which found the strongest expression in the beliefs of Claude Bernard (1813-1878) and of Pavlov (1849-1936). "Only science, exact science about human nature itself, and the most sincere approach to it by the omnipotent scientific method will deliver man from his present gloom" (Pavlov).

The medico-scientific progress of this period of time, on the basis of the fundamental trends which have guided it, could be subdivided into the descriptive phase (the earlier phase) and the dynamic phase (the more recent trend).

Descriptive Phase. During the nineteenth century, psychiatry was primarily involved in the classification of detailed and accurate descriptions of the mental reactions, classifications which are still used in present-day textbooks. Some investigators and authors have called this a "descriptive phase," others, "the organic era" and still others, "the beginning of physiological approach." These descriptions are particularly related to the notable contributions of anatomy, physiology and pathology to neurology and psychiatry. In view of the fact that the clinical knowledge and leading concepts in psychiatry are well-known to all psychiatrists (See bibliography, Lewis and Grinker, for examples), the rest of this presentation will be limited to the discussion of the anatomophysiologic and neuropathologic aspects of the subject.

Neuropathologic Aspects. During this recent period of time a remarkable number of new anatomical structures have been described. The development of microscopy, animal experimentation

*As a consequence of his famous treatise on "the sites and causes of diseases investigated by anatomy" (1776), the anatomical concept of disease processes was established. The same concept was supported by Bichat who attempted to identify lesions with disease (Castiglioni).

and electrical stimulation of the cerebral cortex (Fritsch, 1838-1927; Hitzig, 1838-1907; and Ferrier, 1843-1928) have strengthened the theories of cerebral mapping, cytoarchitectural organization and physiological correlations. Soon the human brain appeared as the most complicated structural apparatus known to science. In our own day, Herrick visualizes it in very simple terms: "If all the equipment of the telegraph, telephone and radio of the North American Continent could be squeezed into a half gallon cup, it would be less intricate than the three pints of brain that fill our skulls."

As the "cellular pathology" (See bibliography, 1858) of Virchow (1821-1902) asserted its supremacy over the "humoral" theory which dominated medical sciences for over 2,000 years, the development of the neuronal theory, expressed by Waldeyer in 1891, established the same foundation in the pathogenesis of neurological and mental diseases. Almost at the same time, Hughlings Jackson (1835-1911) formulated the fundamental creed of neuropathology by declaring that: "There is no part of the nervous system that is not experimented on by disease."

This concept has been revalidated by a remarkable number of new observations and discoveries related to nervous and mental diseases, as, for instance, the description of the inflammatory nature of the luetic process and the discovery of spirochetes in the brain (by Noguchi and Moore in 1913). These contributed to the classification of general paresis as an organic psychosis, determined by syphilis, thus excluding it from the group of psychoses once thought to be precipitated by overindulgence in sex or alcohol. The choreas (St. Vitus' dance and Huntington's type) as well as Parkinson's syndrome, were once believed to be functional. Neuropathologic investigations have demonstrated that they are caused by structural alterations of the extrapyramidal system.

Behavior disorders following certain infectious conditions puzzled psychiatrists for a long time, in view of the fact that a link was not always established between the infectious disease and the following mental disturbance. As a result of neuropathological investigations, we are now acquainted with the cerebral-structure involvement in epidemic encephalitis, measles and other exanthematous or toxinfectious encephalitides. Studies on the

origin of senile plaques, amyloid bodies and neurofibrillary changes have contributed toward establishing the characteristic cerebral alterations of senile and pre-senile psychosis (among which Pick's and Alzheimer's varieties are the better known).*

In connection with vascular pathology, neuropathologists have advanced the explanation that recurrent circulatory disorders are also capable of inducing cerebral structural alterations.*

Neuropathologic investigations have also contributed to better understanding of some toxic psychoses, particularly the alcoholic psychoses, as delirium tremens and Korsakoff's psychosis.* In the field of the mental deficiencies, microscopic investigations have supplied documental data on the pathology of familial amaurotic idiocy (see Sachs, etc.), tuberous sclerosis and myoclonus epilepsy (see Unvericht, Lafora, etc.).

With Nissl, Alzheimer, Golgi, Cajal, Spielmeyer, Hallervorden, Spatz, Vogt, and many other investigators,* descriptive neuropathology has reached new high peaks. Because this present paper aims principally to cover only some fundamental neuropathologic aspects of the nervous system, for more general and detailed information, one should consult the bibliographical references indicated in the footnote.

Dynamic Phase. While, during the nineteenth century, neuropathology, based principally upon investigations of postmortem structural pathology, was dedicated to the mere study of the morphologic changes in diseases of the nervous system, this purely descriptive approach assumed a dynamic character in the twentieth century, as a result of the influence of, and introduction into, neuropathological investigations of new methods that were applied in other biologic and scientific fields. Biologists have emphasized that life is concentrated in the living contents of cells and particularly in the protoplasm. Therefore, protoplasm represents the medium in which all other structural constituents of the cell perform their function (see bibliography, Vogt). Thus, it became necessary for all research biologists and physicians to study the physical and chemical composition and properties of the body tissues. Subsequently, physiology, pathology, immunology and even embryology, became subject to chemical ideas

*Because the literature on these subjects is very extensive, the reader is referred, for the sake of simplicity, to Spielmeyer, Hussin, Bailey, Haymaker, Riese, Ferraro.

and methods which were applied to problems resistant to other forms of investigation.

Due to this progressively dynamic character, neuropathology has made recent valuable contributions to the understanding of certain pathogenic mechanisms of various mental and nervous disorders.* Among the most important of these are: classification of cerebral lipoidosis; classification of primary demyelinating diseases; of cerebral vascular disorders (of a hydrodynamic, arteriosclerotic or biochemical character); of mental and nervous disorders due to histometabolic changes determined by endogenous or exogenous toxic (organic or inorganic) or metabolic processes (including various types of vitamin and nutritional deficiencies, endocrinopathies, etc.); and the effects of the shock therapies (insulin coma and ECT).* There have also been important contributions in work with experimentally induced allergic encephalomyelitides, epileptiform seizures (biochemical and immunochemical mechanisms—see Kopelloff et al.) and experimental psychosis (by pharmacodynamic substances and more recently mescaline, lysergic acid, etc.—see Hoch et al.).

Present Trends

Histochemistry. It is not the purpose, nor is this the place, to discuss in detail the numerous contributions which have resulted from the use of recently developed techniques and of newly modified or devised research instruments. Therefore, only a few demonstrative examples will be offered—to give something of a general impression about their significance in the study of nervous and mental disorders.

Histochemical techniques have revealed that the so-called Nissl bodies, which represent the fundamental morphologic constituents of the cytoplasm of the nerve cells, are composed fundamentally of nucleotids (see Brachet). Caspersson and his associates arrived at the same conclusion on the basis of ultraviolet microscopic spectrophotometry.

*Because the literature on these subjects is very extensive, the reader is referred, for the sake of simplicity, to: Spielmeyer; Buzzard and Greenfield; Bumke and Foester; Penfield; Hassin; Freeman; Weil; Biggart; Lichtenstein; Courville; etc. See: *Yearbook of Neurology, Psychiatry and Endocrinology*, 1934-1955, and *Progress in Neurology and Psychiatry*, editor, E. A. Spiegel, 1946-1955.

Portis and co-workers studied the changes of content of the nucleic acids (ribonucleic acid-RNA, and desoxyribonucleic acid DNA) in motor cells during chromatolysis. Highly significant decreases in the ribonucleic acid (RNA) content of gray matter at two, 14 and 28 days, were observed following axonal section while the desoxyribonuleic acid (DNA) content was virtually unchanged.

Some qualitative and quantitative chemical analyses of the lipids in myelinated nerves during Wallerian degeneration have been made by Johnson, McNabb and Rossiter, and by Brante. Further histochemical investigations, by Noback and Montagna, of the myelin sheath and its fragmentation products during Wallerian degeneration revealed that the myelin sheath degeneration products of the first 10 days (following transection of normal sciatic nerves in rats) have essentially the same histochemical properties as the normal myelin sheath. These findings suggest that this is primarily the period of physical fragmentation and not of the chemical alteration of the myelin sheath. From 10 days to 40 days after transection, products of Wallerian degeneration do not all show the same histochemical properties. This is the period during which chemical alterations of the lipids accompany physical fragmentation of myelin sheaths.

Furthermore, in comparative histopathologic and histometabolic investigations in experimental allergic encephalomyelitis and some human demyelinating diseases, Roizin has observed that the neutral fats, fatty acids, mixtures of cholesterol esters and cholesterol, some phosphatides and various other lipid fractions are in proportions commensurate with the intensity of the demyelinating process, particularly in the acute and transitional stages. With the advancement of the pathologic process the fatty acids, neutral fats, cholesterol, cholesterol ester mixtures and, to a much lesser extent, phosphatides are found to have decreased gradually or to have been disposed of by a gradual and progressive process of metabolization. Hence, in the chronic or much advanced stages, very little lipid material is noticed in the areas of demyelination.

Greenfield in his recent re-classification of "diffuse demyelinating sclerosis" particularly emphasizes the metachromatic type (familial and nonfamilial) on the basis of certain histochemical reactions. Still more recently Feigin and Lemieux confirm the

presence of the metachromatic substance in diffuse sclerosis, and suggest that this material is a complex glycopoprotein in nature, the lipid fraction of which shows characteristics of phosphatides and glycolipids (Feigin).

In addition, Roizin, Helfand and Moore describe metachromatic bodies in disseminated, diffuse and transitional demyelination of the central nervous system.

In discussing the pathogenesis of cerebral lipoidosis, Thannhauser considers that the classification of the Schuller-Christian syndrome, Gaucher's disease, Niemann-Pick's disease and Tay-Sachs disease, as "lipoidoses" is justified, inasmuch as each of them is caused by a metabolic disorder of the lipids though these reactions differ in chemical nature. Jervis also emphasizes the fact that solubility properties, as well as direct chemical examination, indicate that the infiltrating lipid is different in each form of cerebral lipoidosis: In Tay-Sachs disease, the lipid is ganglioside, containing neuramic acid (Klenk); in Niemann-Picks disease it is sphingomyelin (Klenk); in Gaucher's disease, kerasin (Thannhauser and Schmidt); and in the Schuller-Christian disease, it is principally cholesterol (Thannhauser).

Givner and Roizin, in comparative histopathologic and histochemical investigations of the nerve cells of the retina and brain, in two cases of juvenile amaurotic familial idiocy, report the presence of a mixture of phosphatides and cerebrosides in the involved retinal and cerebral neurons.

From the enormous and incessantly progressive field of enzymology, only a few selected works will be discussed—to give only a general impression about their importance in the study of normal, and of some pathologic, processes of the nervous system. Flexner and co-workers have attempted to investigate the physiologic development of the brain cortex and its relationship to morphology and correlated enzyme systems. In the developing cerebral cortex of the fetal pig, there is a critical period about half-way through gestation, when there is an abrupt increase in the number of Nissl bodies, a rapid increase in the size of the nerve cells and a sudden rise in the activity of the respiratory enzyme cytochrome c. Further work showed that succinic dehydrogenase begins to increase rapidly in activity a few days after this period; the same pattern is followed by apyrase or

adenosine triphosphatase. Jasper, Bridgman and Carmichael were able to record electrical activity from the cortex of the fetal guinea pig at about the same stage of development as that of the structural and chemical changes just noted.

Variations in the activity of the phosphatases (a group of enzymes which catalyze the liberation of inorganic phosphates from phosphate esters) have been described in chromatolytic processes (Bodian and Mellors) and in brain tumors (Kabat, Wolf and Neuman.) Comparative histologic and histochemical studies of brain biopsies and topectomies in various mental disorders, as reported by Roizin, show variability in the distribution of Nissl bodies, with concomitant variability of activity in indophenol-oxidases and peroxidases. Furthermore, correlations between inflammatory reactions (of a hematogenous or histogenous character) and indophenol-oxidases and peroxidases are also observed in experimental allergic encephalomyelitis in Rhesus monkeys (Roizin).

In a recent review of cholinesterases, Koelle reports that "the central nervous system of several species has been shown to contain both specific (true, acetyl-, aceto-) and non-specific (pseudo-, butyro-) cholinesterase (ChE)." The highest concentrations of specific ChE are found in the neurons of most motor nuclei and certain correlation centers; high concentrations are also observed in several tertiary afferent neurons. Moderate concentrations are noted in the second neurons of several sensory pathways and other correlation centers; little or no activity is present in primary sensory neurons, certain neurons synapsing directly with motor neurons, and in other correlation centers. Non-specific cholinesterase activity is localized chiefly in the walls of the capillaries, the muscle fibers of arterioles and venules, and glia cells (especially astrocytes); low concentrations of non-specific cholinesterase also appear to be present in certain neurons.

Quantative variations of acetylcholinesterase in the architectonic layers of rat cerebral cortex (Pope) and in the prefrontal cortex of psychotic and non-psychotic patients (Pope, Meath, Cavaness, Livingston and Thompson) have been recently reported. A disadvantage of such microquantative experiment is the difficulty of obtaining quantitative histological data. Although comparative enzyme activities may be ascertained quantitatively, it is still difficult or impossible to determine the absolute, or even

relative, amounts of the many different anatomical constituents of the complex structural organization of the central nervous system.

Radioisotopes. During the recent years various radioactive elements have been used for investigative and diagnostic purposes. For instance, Silverstone and co-workers have used radioactive phosphorus in the localization and demarcation of brain tumors. A Geiger-Magnus counter of diameter comparable to that of a ventricular needle has been employed at operation in 33 cases, with data adequate for localization obtained in 29 cases. In a subsequent study, Steinberg and Selverstone have employed P^{32} in radioautography* of 18 cerebral tumors. Autographic blackening has been consistently much higher in tumor tissue than in brain, but is subject to considerable variation within certain tumors. These variations, reflecting differences in the uptake of radioactive phosphate ions by various parts of the tumor, may be correlated with certain histologic features. In this regard, Askenazy, Davis and Martin demonstrate that the affinity of radiodye (diiodo-fluorescein) is related to the cellularity and vascular pattern of the tumor. The more malignant the neoplasm, the greater is the radiofluorescein concentration.

In traumatic, purulent and ischemic lesions of the brain in cats, Stern and Marshall report increased contents of radioactive phosphorus following intravenous administration of P^{32} when compared with control brain.

In view of the fact that this methodology is still in the experimental stages, additional research investigations are needed before it will be possible to evaluate the true significance of such findings.

Electron Microscopy. Electron microscopy has been used extensively in bacteriology (Mudd et al.), biology (Wykoff etc.), and histology of various tissues (Porter et al.); but its use in nervous tissue investigations has been very limited so far because of technical difficulties (Ventra). Some investigators, however, have succeeded in obtaining satisfactory sections of the peripheral

*A method for the detection of radioisotopes in tissues based upon their ability to affect the silver bromide crystals of photographic emulsions. Such crystals act as microdetectors of radiation and are therefore useful in visualizing locations of radioactive-elements in microscopic structures.

nerves and of unmyelinated nerve fibers of the central nervous system (Schmitt and Green, and Moran-Fernandez); of nerve cells (Hartman; Hagenau and Bernhard; Palay and Palade); and of spinal cords of normal guinea pigs and of guinea pigs affected by experimental allergic encephalomyelitis (Roizin and Dmochowski). Though most of these studies are concordant in revealing that the axoplasm is composed of very thin fibrils which have a parallel arrangement and show a certain regular nodosity in peripheral nerves, the structural organizations of Golgi's apparatus and of the Nissl substance, however, are still disputed (Pease and Baker, Hartman). In addition, an unusual pleomorphism of mitochondria has also been noticed in some nerve cells and glia elements (Roizin and Dmochowski). Structures which resemble Golgi's apparatus and some other intracytoplasmic constituents will require more extensive studies before a more definite opinion is formulated.

DeRobertis and Sotelo's studies of nerve fibers and cells of embryonic chicken brain in artificial culture indicate that early fibrogenesis is characterized by the appearance, in the homogeneous matrix of the cytoplasm, of fine submicroscopic strands of high electronic density. This dense material is composed of isolated microvesicles, or short chains of them that show a tendency to fuse into double-edged cylindrical structures. In more differentiated cells, definite long cylindrical fibrous elements are noticed. The nerve fibers appear composed of closely packed, parallel "neurotubules." Mitochondria and a peripheral "plasma membrane" are distinctly differentiated. The terminal growing end usually shows an enlarged mass and a "finger-like" process. The enlarged mass contains a tightly packed "microvesicular material," similar to that observed within the cell in early embryogenesis. DeRobertis and Sotelo say that their observations seem to support other similar findings from literature, indicating that the terminal growing end is a center of fibrogenetic activity.

Meyer has also studied the structure of the spinal ganglia of chick embryos in artificial culture. He observes a fine longitudinal striation in the cellular protoplasm, extending into the growing ends of the fibers. The fibrils which are responsible for the stria-

tion show parallel arrangements and regular "periodicity which gradually goes over into a beady appearance" in their terminal extension, where smooth fibrils can also be found. More recently, DeRobertis, in a preliminary report, has discussed the nucleocytoplasmic relationship and the basophilic substance (ergastoplasm) of nerve cells in the sympathetic ganglia of the bullfrog and in the nerve cord of the earthworm as visualized with electron microscopy. Within the ergastoplasm, adjacent to the nuclear membrane "clusters of dense material which occupy the projections of chromatin masses into the cytoplasm" are detected. These observations, in the opinion of the investigators, suggest a relationship, at a macromolecular level, between the nucleus and the basophilic substance of the nerve cell cytoplasm, in the sense that components of the basophilic substance might be, at least in part, of nuclear origin.

It appears evident that it is still too early to draw any conclusions about the real value of the histochemical and biophysical findings just discussed in the study of the nervous and mental diseases, because they represent only some preliminary observations. Therefore, more systematic studies of the normal structural organization of the central nervous tissue, as well as control and standardized procedures, are still to be achieved before their significance in the study of pathologic processes is determined.

The present writer emphasizes the importance of these newer histochemical and biophysical procedures not with the purpose of replacing modern neuropathology by them, but merely to indicate how the basic neuropathologic research investigations might, and should, be integrated with the complementary techniques or procedures described. Furthermore, one must also be aware of the fact that each of the histochemical or biophysical procedures mentioned is capable of revealing only certain individual constituents—or a limited number of them—of the very complex anatomofunctional integrated systems.

Otherwise one may be misled into erroneous or unilateral interpretation, such, for instance, as has occurred in the case of the correlation between nucleoprotein metabolism and nerve cell function. Hyden and Hartelius tried to influence the function of the nerve cell with malononitrile and certain other organic nitriles

which are known to cause chromatolytic changes in nerve cells.* With ultraviolet microspectrophotometry, these authors observed a stimulation of the "cytoplasmic protein-forming system of the nerve cells" of rabbits treated with these substances. These observations have led Hyden and Hartelius to treat human mental disorders with malononitrile, on the theory that in some mental disorders the "cytoplasmic protein formation of nerve cells" is disturbed. The first clinical results, observed in certain mental disorders, showed in their opinion, stimulation of psychic functions. But, as it is now well known, other investigators, (McKinnon et al.) were unable to confirm Hyden and Hartelius' observations.

Another example of erroneous generalization from unilateral or limited biophysical findings is exemplified by a finding in 1941 by Landstrom, Caspersson and Wohlfart on the basis of ultraviolet microspectrophotometry. This is that the enzymatic mechanism in chromatolysis is present exclusively in the nucleus and is ineffective or absent from the cytoplasm. Gersh and Bodian, however, in studying various phases of chromatolysis (following axon reaction) with ultraviolet spectromicroscopy and with concomitant tests for the activity of ribonuclease, have noted that the altered enzymatic mechanisms in chromatolysis are present both in the nucleus and the cytoplasm. In the light of these findings, the conclusion by Landstrom, Caspersson and Wohlfart does not appear justified. As a matter of fact, Capersson has subsequently warned (in 1950) that: "It cannot be stressed enough that only the evaluations of absorption spectra, taken with the proper procedures, are of any use in the work of nucleotide and protein distribution in the cell."

*It is well established that the normal distribution of Nissl bodies in different functional groups of nerve cells shows great variation and it is also well known that physiological and pathological changes are equally variable. The interpretations different morphological changes—that essentially the same physicochemical proces- of chromatolysis following the axon reaction in motor neurons. It has been further assumed—although the atypical variants from this picture may show strikingly different morphological changes—that essentially the same physicochemical processes are involved, though they differ in sequence, rate, extent and in the pre-existing structural differences in cells. It should be emphasized that the mechanisms proposed do not necessarily exclude disturbances in other intracellular, morphologic, biochemical, and biophysical processes.

It appears evident from such examples that the neuropathologists should continue to be guided in their conclusions principally by the basic structural (neuro-anatomic), functional (neurophysiologic) and clinico-pathologic findings, and that while histochemical and biophysical findings are still in the stage of preliminary experimentation, they should be evaluated only after adequate standardization.

Future Perspectives

Correlative and Integrating Concepts. In the light of present-day concepts, the neuron, or the anatomico-functional unit of the nervous system, appears to be a cell composed of a highly-organized structure which is "designed to synthesize, store and discharge electrochemical energy. This complex unit, to carry out its specific assignment, must be ready upon reception of an appropriate stimulus, to deliver its quantum of energy to the synaptic field at the terminal portions of its axon. Although each cellular unit knows no function other than that of reception, conduction and discharge, the many differences in anatomical connection, molecular organization, enzymatic and biochemical requirements and the many differences which are present in their synaptic relationships not only indicate a diversity of function of neurons, but also demonstrate the many areas where diseases, biophysical phenomena, chemical processes and drugs may alter individual cellular function" (Rose).

In addition, a brief analysis of the new trends indicates that they aim not only to obtain histochemical and biophysical data beyond the limitations of histologic techniques and standard microscopy, but that they also open new avenues for the localization of, and correlation of, biochemical, biophysical and physiological processes within nerve cells and their related structures.

As one looks toward the future in the light of these numerous new technical procedures of exploration in functional or pathologic states, one should also work in the direction of bringing them toward a common ground. A glance into the history of the sciences will show that whenever two sciences or branches of science blend together, something new is found: a new scientific approach, with new methods, or special apparatus for experi-

mentation and study, such as, for instance, occurred in the case of electrophysiology, the EEG, and histometabolism. In such instances, new points of view have frequently helped in, or led to, the discovery of new facts or interrelationships, not only of an experimental anatomical, physiological and pathological character, but also of very significant diagnostic and therapeutic value. However, one also must be very cautious in their interpretation inasmuch as the new data may also change into a new set of characteristics as yet only partly understood, if even recognized. Therefore, Bacon's suggestions in *The Advancement of Learning* are very appropriate to keep in mind: "There were certain things which could be accomplished by some particular person, but not by everyone; there were some things which could not be done within one man's lifetime, but could be accomplished through succession of ages . . ." (Cited by Barthélemy-St. Hilaire).

Conclusions and Summary

An attempt has been made here to summarize briefly the characteristic aspects, trends and objectives of neuropathology. Through study of the past, in the sequence of historical background and continuity, the construction and relationship of neuropathology to psychiatry, and to other concurrent medical, and other scientific, thought, have been traced from the science's early development into the perspective of the future.

Like medicine in general, and particularly like neuropsychiatry, neuropathology has also passed, during its seesaw evolution, through empirical, theological and metaphysical stages. With the development of other medicobiological sciences, especially neuroanatomy and neurophysiology, and following the introduction of microscopy and new histologic techniques, neuropathology has gradually abandoned superstitions, arbitrary hypotheses and speculations—to replace them with the scientific approach and with experimental investigations.

Through the Renaissance up to the present time, neuropathology has continued to maintain its intimate bonds with neurology and psychiatry, while on the other hand it has established closer relationships with cytophysiology and pathology.

By turning the focus of its histochemically and biophysically reinforced light toward the future, neuropathology aims to penetrate depths hitherto unexplored.

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EDITORIAL COMMENT

PARANOIA FACTITIA

Let's play paranoid! As children, we've all played house and played doctor and nurse and soldier—and policeman and fireman. As adults, some of us played great exalted chieftainess or noble sir key keeper of the gold-plated custodians of the mystic sea. These are all projects with social and psychological values as well as a large content of good asceptic fun. They have been traditional human activities since Neanderthal children played cannibal in preparation for adult responsibilities and Cro-Magnon adults painted records of their magical play-hunter games on the walls of their caves. For values, anybody who has forgotten what all work and no play did to Jack had better go back to nursery school. And there is no reason to limit the fun that keeps Jack from being a dull boy to jacks, golf, beer-and-television baseball, or water-skiing. For instance, "Let's play Senate prober" might be an amusing idea. As a version appropriate to psychiatry, "Let's play paranoid" might be equally amusing and have the additional value of blowing off at least a little high pressure steam.

To "play paranoid"—as proposed here—is not to make light in any way of a most serious mental disorder. But it is to make something of a game of a state of affairs that ought to be discussed, and yet ought not to be discussed too seriously. It is to enable talk about a situation where there is every reason to avoid dealing in personalities and squabbling over details, yet where some good may be accomplished by voicing a few plain and not too pleasant truths in the way of generalities. Also, when one plays paranoid, one may feel licensed to utter a few querulous complaints and ask a few ill-natured questions as to why "they" are hostile and why they do this or that, when it might be highly embarrassing to inquire specifically, "Doctor, what is the matter with you, anyway?" And if hypothetical answers are to be suggested for hypothetical questions, it may be much less offensive to apply the answers to otherwise unidentified "them" than to affix them to a specific him or her—perhaps most unfairly.

To play paranoid, what is the matter with those of our esteemed colleagues who have lately been "going to and fro in the earth,

and . . . walking up and down in it,"* spouting this and that charge against public institutional psychiatry and muttering this and that about unspeakable public institutional psychiatrists? What motivates these people, and whence their hostility? Why the persistent endeavor to do our "credit in this World" such wrong? Of course, one could raise the question of whether the current criticisms are justified. That would be to debate logically and reasonably and would be justifiable if the charges had enough foundation to be worth answering. It would also, perhaps, be the proper course if one were not playing paranoid. But in playing paranoid, the *argumentum ad hominem* is appropriate, as well as more fun.

To generalize hastily and briefly, "they"—our critics—have been going about proclaiming the low state of our public institutions, the barrenness of their research, the poor results of their treatment, the lack of professional competence of their staffs, their failure to lead in new therapies, their poor quality of food, housing, and nursing care. At a time when, in the New York State Department of Mental Hygiene alone, research is expanding on an unprecedented scale and in unprecedented directions, when intensive treatment with the new therapies is returning patients to the community at a rate never before approached, when community mental health services are receiving full support, when training of personnel has high priority, and when there is an active program of providing new and improving old physical facilities, there seems little reason for public institutional psychiatry to rush into a frenzied defense of itself. Of one matter, shortage of general and, in particular, of professional, personnel, the public institutions are well aware; and they themselves have taken the lead in the campaign for personnel reinforcement. Of the rest, even when not playing paranoid, one may think the generality of current criticisms too absurd to answer and still wonder about their motivation.

To return to the game, what, then, is the motivation? Or what are the motivations? For no psychiatrist will imagine that an answer to an emotional problem of this complexity can be simple. Suppose one hazards a few guesses.

A first reasonable guess might be that something in the nature

*Job 1. 7. (In view of everything, an appropriate reference.)

of an unresolved professional Oedipus complex—if such a thing can be imagined—is somehow involved. To obtain his diploma, the specialist in psychiatry must serve a specified number of years in an approved psychiatric institution. The vast majority of positions open to the resident student are still in public hospitals. Therefore, the vast majority of psychiatrists in private practice and on private institutional staffs have served their professional apprenticeships in public institutions. In the personal backgrounds of most of them, some public institution stands professionally *in loco parentis.*

There are good fathers and bad fathers, and one can have a violent Oedipal revolt against a good father as well as against a bad father. So there are good and bad institutional father-surrogates. One can have a violent Oedipal reaction against a good one. What if, as everybody will admit, one can point objectively to bad ones to support the revolt against the good ones? In this or that institution, "they," the critics, spent so many miserable years, victims of tyranny, of arbitrary administrative procedures, of petty injustices. Psychiatrists are human, with human emotional problems; some students believe they have more than an average share or they would not be in psychiatry. It is permissible to suspect that "they" do not look back with affection on their dear old public hospital "dads." So "they" get even. They spread biased information right and left, they whisper discouragement to young residents; they dish out distrust to the general public. They damage every way they can; if they could get hold of an influencing machine, they would use it.

Of course, this is only a small part of it. "They" are not too simply motivated. In addition to "Oedipal" frustrations, there is a lingering belief from a long-vanished state of society that to draw public money is to eat at a public trough. It didn't use to, once upon a time, be respectable. "They" hold it is still not respectable. If a man were any good, he would not work for the state (or substitute Veterans Administration or United States Public Health Service). What kind of doctor will work at a public job for $10,000 a year when he could make $45,000 in private practice? "They" know the answers, of course; public institution psychiatry does get some doctors who cannot afford to set up private practice; but the vast majority go into psychiatry be-

cause they appreciate that they themselves have emotional needs and so can identify with patients whose emotional needs are greater and more distressing. But "they" do not credit the public institution psychiatrist with any degree of unselfish motivation. The public institution psychiatrist is simply a hog at the public trough, because he is not a smart enough hog to find a better private one.

One may bring a further emotional charge against the public institution physician. He has security. Or he is regarded by private practitioners as having security—fiscal and emotional. The private practitioner either actually is, or must feel—unless he has amassed a fortune—insecure. There are only a few chronic somatic disorders and only a few surgical procedures which can be compared to a severe mental disorder, in expense to the patient and his family. The psychiatrist in private practice is necessarily a high-priced specialist. While he may take charity patients generously and, in other cases, temper the wind to the shorn lamb, he must depend for his essential income—and he has to eat—on patients who are considerably better off financially than the average man, or the average private patient of other doctors. He may be secure beyond the dreams of the public-employed psychiatrist, but he does not feel secure.

The world has been changing and is continuing to change. The days of the horse-and-buggy doctor who could live comfortably on his life savings in his village home have gone forever. The role of what can be called public medicine (not socialized medicine) has grown. Perhaps because of an aging population, perhaps because of other factors, the proportions of our ill who must be cared for at public expense have increased. A chronic psychosis can mean the financial ruin of a family in otherwise moderately comfortable circumstances. So the need for the public mental hospital doctor has increased; and the private practitioner must —rightly or wrongly—feel his position is ever more precarious.

The public mental hospital doctor is not responsible for this present state of the world. As a rule, he doesn't like it and would like to change it—he may even feel that he personally could make a better world left-handed. But his problem is to cope with it—and his fate is to be blamed for it by the colleague who envies his apparent security. His fate is also to be cursed, for his "de-

pendency" and lack of initiative and of ability, by the specialists who practise privately or work in private institutions.

"Their" way of cursing the public hospital psychiatrist is to slander his institutions, decry his ability and sneer at his therapy. An immense amount of harm has been done in the way of arousing relatives' apprehensions, increasing public distrust, and even making it difficult to get appropriations of proper funds for everything from care to research. It all dates back to a way of life that passed by forever early in the century. In the early years of the century, a public employee—except an elected politician—was not only a greedy feeder at the tax-filled trough and an inferior sort of subhuman who sought security at the price of ambition; he was a morally undesirable character. One may recall that between 1900 and World War I, or maybe World War II, the enlisted man of our regular army was commonly considered to be only a grade or two above a tramp. He was a person unwilling to work, a shiftless beer-swiller, a man without the ambition or intelligence to toil for an honest living—a rightful object of suspicion and contempt. One cannot pretend that the medical officer of a public mental institution was ever quite in his social class—he was a professional man after all, even in 1900—but he was in something like a professional version of it. If he wasn't inferior, what was he doing in public employment?

There are astonishing survivals of this attitude—as anachronistic almost as a Frenchman of the 1950's fanatically working for the restoration of the Bourbon kings. A widely known newspaper columnist recently voiced it in giving advice to a young girl who had asked what sort of "pensions" newspaper people received when they retired. Although newspaper work has long since entered the economic phase where reporters and news workers in general have organized, with better pay and increased security in view, our columnist was indignant. The day of the casual, job-jumping reporter has gone—which may be regrettable—but our authority advised:

"I think . . . that you had better make up your mind whether you are interested in newspaper work or in a pension. If it is a pension that you seek, then the Civil Service is the best place to go. On a government job, one can get along well doing a minimum of work, never getting in anybody's way, offending no

superior, keeping one's nose clean, as the phrase is, and if one does not die before the time for retirement comes, then there is the pension to take care of a tiresome old age." Of course, one can also do this in many jobs in private employment, and there are many workers in public employment who work hard, give their honest best and are thoroughly admirable employees and citizens. Which type a person is—whether in a private or public job—is a matter of character and personality, and a matter also of supervision and encouragement on the part of his superiors. Almost any person with experience in both private and public employment can testify that there is little essential difference—aside from the increased feeling of security in public employment. The public employee can look forward to a pension, for which he himself saves by working for lower wages than he would receive in a private job—but many private employees now retire on pensions. Although the accusation still stings, the charge that one is a loafer on the public payroll is—under modern civil service administration—now largely a canard. Of course, there are some such loafers; there are sinecures; the mayor's brother-in-law may work happily 300 or so days a year, inspecting building law violations from the comfortable back room of the tavern just behind city hall. But in the main office of the Big Brass Bucket Borderline Corporation, there is the principal stockholder's brother-in-law who is a highly-paid vice president, and a just-out-of-college grandson who is assistant office manager—both with the difficult duties of entertaining at company expense at two-hour luncheons, and seducing beautiful but poorly-paid members of the stenographic and clerical staffs. There certainly is the grafting political appointee who steals right and left and wrecks his governmental department; but there is also the unscrupulous corporation president who tells his board of directors: "I've ruined three companies already; and, by Gawd, I'll ruin this one if I feel like it!" (For this splendid manifesto of the spirit of business, chapter and verse could be cited—but there is the law of libel.)

The point to this is that no matter where you slice human nature—whether in city hall or the Kremlin or Wall Street—some of it will still be baloney. The contention here is merely to the effect that baloney is baloney. It is no worse in private practice

than it is on the public payroll; but it is no worse on the public payroll than it is in private practice. It is strange reasoning, if it is reasoning at all, that degrades a social service so important that it is paid for by the public as a whole and enobles the same service when it is paid for individually by the fortunately-prosperous part of the citizenry.

But naturally, this is far from the whole of the indictment "they" bring against public institution psychiatry. The institutions which have pioneered with, and had the greatest success with, "the new drugs" are those which have been under fire for failure to use modern and adequate treatment methods. They are the public institutions—for the public, not the private, hospitals have had, by necessity to take over the leadership and assume the burden of validating every new advance in therapy. It is so because the private institutions neither afford the numbers nor the representative populations for extensive—and statistically significant—employment of therapeutic innovations and evaluation of their results against controls. A treatment method may or may not be discovered or developed in a public institution. But even if a private practitioner or a private institution is responsible for development, it invariably remains for public institutional practice to evaluate. This has been so with every recent form of physical or drug therapy—insulin, metrazol, electric shock, psychosurgery, and now the "new drugs." Even in the study of topectomy, with comparatively small numbers of patients undergoing the operations, Columbia University found it necessary to co-operate with a large public mental hospital to obtain the selection of patients needed and the selection of groups of reasonably comparable controls.

As with testing and evaluating, so it is becoming with research. The great medical schools, particularly those connected with still larger medical centers, are still great research centers, supported by endowment and grant. But important research is out of the reach of the private institution which is not connected with a hospital center. And increasing proportions of the grants made for research and fellowship are from governmental sources, rather than from foundations or private business enterprises. As mental disorder is an expensive disorder, research into it is highly expensive also. It calls for large numbers of patients of widely

differing diagnostic and age groupings; it calls for carefully selected and comparatively highly paid specialists; psychiatric research is nothing which can be carried out by a couple of graduate chemists and four or five laboratory assistants. It is likely to call for a team headed by psychiatrists and including besides, neurologists, electro-encephalographers, internists, psychologists, physicists, nurses, occupational therapists and other technicians and specialists.

For an elaborate, specialized research of this type, one might consider the staff employed for the joint Columbia University-Greystone Park investigation of topectomy. For a large, permanent research organization, the New York State Psychiatric Institute can serve as example. It has more than 50 paid staff members, all but two or three of them rating as scientists, with more than a dozen volunteer residents in psychiatry, more than 200 additional employees, and affiliations with the New York Neurological Institute, Presbyterian Hospital, Columbia University and other facilities of a very large medical center. Its scientific workers range from bacteriologists to psychologists; the Institute is prepared to do research in clinical psychiatry, genetics, biochemistry, pharmacology, neuropathology and other fields. It has an elaborate and expensive physical plant, and it costs something like a million and a half dollars a year to operate. To this one may add state-supported research at half a dozen other institutions in the New York State Department of Mental Hygiene. There are a dozen research scientists and a research director on a special staff at Rockland State Hospital, and $100,000 a year would not miss the mark by very much on current costs there. Creedmoor has a research set-up only a little smaller; and specialized research work is being carried on at other institutions, where a director or specially-assigned medical staff member can call on large medical and nursing staffs to carry out scientific inquiry with the facilities and the patient populations that only public institutions can offer.

This is the set-up in only one state. Active, large-scale research has long been under way in a number of others; the work at Boston Psychopathic Hospital and Worcester (Mass.) State Hospital, for example, has general international recognition. And one must add to the work done by the states, the research carried

out or supported by the United States Public Health Service, the Veterans Administration and other federal facilities. The flossiest, most expensive and best-endowed private institution would be hard-put-to-it to set up a research project comparable to one of the more modest tax-supported institutions.

In a paranoid sort of way—remember, this is playing paranoid—one may express pity, understanding and sympathy for the unfortunate private research workers who pant hungrily, with tongues hanging out, at the sight of the extent and the facilities of public psychiatric research. "They," from a paranoid point of view, have a real cause for animosity here. They cannot hope to equal the scope or the results of public institution research, so they sneer at it; it is not a reasonable, but it is certainly a psychiatrically-understandable, reaction. The situation, of course, obtains in Europe as well as in the United States; nowhere in the world can private psychiatric research obtain the funds, the scientists and the physical facilities to do the work of public research.

If one were not playing paranoid, it would be possible to join the critics in regretting this situation. Freedom, variety and fruitfulness of research are encouraged by numbers and generous support of research facilities. The public director of research is only human. He must follow most intensively the leads which he believes will be most productive. If he is a good man—and most of our directors are—he will always allow for other points of view and for work in other than his preferred direction. And so he does. But a man oriented toward pharmacology cannot support long and apparently unproductive research in psychotherapy with the same enthusiasm he has for his own specialty. And the psychotherapeutically-oriented research director is likely to be less than devotedly enthusiastic about research into psychosurgery. So it is a good thing that there are many agencies and many institutes—of varying support and varying views—of government-financed psychiatric research. And it is a pity that there are not just as many more, financed and directed privately. But berating and belittling public research, which is almost the only large effective research that there is, will not do much to remedy the situation.

It should not be supposed that this survey exhausts the possibilities of the play-paranoid game. It should not be forgotten,

for instance, that one of the things *they* have against *us* is that *we* represent socialized medicine and a trend toward socialized medicine. This is a subject discussed less often than it was a few years ago when there was an active, organized attempt to nationalize American medicine and when British practitioners were conducting funeral and memorial services over a dead science. The American attempt proved less serious than was expected; and British medical science wasn't dead after all. One does not suppose that nationalization has benefited British medicine—most professional testimony is quite to the contrary—but it hasn't killed it. And if its scientific advance has been affected, it seems to have been slowed, not halted.

The British experiment is something nobody but a very scant handful of professional wild jackasses want to copy here; but there is still nervous stamping and ear-twitching about it, particularly among private practitioners in specialist groups where there is large public institutional, or other public, practice. Public institutional practice is not, of course, nationalized or socialized medicine. It should be noted that the medical scientist who is paid for research by a private foundation or a pharmaceutical corporation is not practising corporate medicine. Neither is a medical staff member of the Mayo, the Lahey, or the Menninger Clinic. (Corporate medicine, incidentally, used to be almost as big and bad a bugaboo to the private practitioner as nationalized medicine later became.) There is a wide difference between working with or at and being absorbed or incorporated by.

There have been medical chores since civilization began—and maybe before—which have had to be performed by physicians in public employ. But the process was not nationalization or socialization. The army surgeon of the Roman legion was a free Roman citizen who chose army surgery as his way of life. The official physician of the medieval Arabian or Christian court was likewise no puppet of officialdom. A capricious monarch might reward or slay, enrich or imprison; but he did not tell the physician how to carry out his treatments or lay down a code of professional conduct and ethics for him. And the court physician usually chose his position freely and was free to leave when he chose—and, of course, if and when he dared. He might on occasion be terrorized, or even enslaved, but he was never success-

fully regimented. Even the army doctor never has been—consider the revolution in surgery brought about by Ambroise Paré in the face of professional and other official attempts to suppress him.

With modern expansion of civilization throughout the length and breadth of the world, the need multiplied for the physician in public employment. Hygiene and preventive medicine are no jobs for the family doctor. From military and volunteer medical preventive work, our modern public health services developed—from local departments to national organizations. Freedom from the plagues that ravaged the world in darker ages could never have been achieved without them.

The problem of narcotic addiction, involved as it is with crime, necessitated other public health employment. Private practitioners could not specialize in addiction problems and live on fees from convicts.

There came, too, the general problem of chronic diseases, with economically unfortunate people unable to pay for proper medical treatment, and charity spread too thin to afford a protective blanket. Such has been the case with tuberculosis—where even families in moderate circumstances have been unable to meet the costs of increasingly-expensive treatment and increasingly-prolonged care. Such is rapidly becoming the case with chronic, non-psychotic geriatric disorders. Such has long been the case with psychiatric illnesses.

To confuse these necessary and minimal public health services with socialized medicine is the pinnacle of absurdity; they have nothing in common but support by taxes. The public health officer of Central City is no panel doctor, ordered hither and yon, told what patients he must accept, what office hours he must keep. He is a physician who has accepted a public job, is free professionally in its administration, and is free to leave it. Neither is the state hospital psychiatrist a helpless member of a medical repair crew. He can, and often does, leave the service for private practice. Or he may take another public job, with the Veterans Administration, or the army, or the county or the city. There are not so many public employers as private patients; but there are enough, and enough different jurisdictions to insure (one may hope forever) against regimentation. The only important differ-

ences between the specialist in private practice and the specialist in public employment are differences in sources of income and conditions of practice. The private specialists and the imaginary "they," know this, of course. But the knowledge seems purely intellectual. It is ineffective knowledge when directed against prejudice and other emotional barriers.

"They" know it isn't so; but they say it just the same. This is a divorce between intellect and affect—and maybe it should be mentioned that, in psychiatry, there is a word for it. Or maybe it shouldn't be mentioned. After all, this is a game. The psychiatrist in public hospital work is pretending he is paranoid, that he has a group of hostile, unrelenting derogators and detractors, intent on doing him and his professional standing harm.

Sometimes it doesn't seem much like a game. One could document the hostility, name names, give dates, cite instances of unfounded, damaging statement—if it weren't a game. And while this has been fun, is it really so amusing after all? For some of the things one sees while playing paranoid have happened and are continuing to happen. There is a certain lack of reason, intellect and common sense about it.

Cherchez le paranoïaque!

LETTER TO THE EDITOR

CONCERNING ESP

To the Editor of THE PSYCHIATRIC QUARTERLY:

Sir:

Without the intention of participating in an argument for or against parapsychology (an argument for which I am surely not qualified), I nevertheless would like to object strongly to Dr. Szasz's essay in the January issue of THE PSYCHIATRIC QUARTERLY, on technical and methodical grounds. Dr. Szasz spends great efforts to prove that ESP phenomena cannot exist for reasons of definition. The fallacy and futility inherent in this way of arguing was proved once and for all by Emanuel Kant's analysis of reasoning. It can serve no useful purpose to regress to ways of thinking which every reputable logician of the last two and one-half centuries has rejected. Nothing can be argued into existence or out of it by "definition."

Even more surprising is Dr. Szasz's claim that "one must remember that scientists have been unanimous in their emphasis that there are some problems in science which are 'important' and others which are not," and his claim that "a great deal of valuable human talent" is being wasted by ESP research.

Insight into the importance of scientific problems may be possible to future historians; it is never at the disposition of contemporaries. "What is the good of knowing the 'order' of cards in such [ESP] experiments?" Dr. Szasz asks. I am reminded of a famous historical anecdote: "Of what use will all this be to mankind?" This question was put to Faraday (1791-1867) after he had demonstrated to a lay audience his work: a magnetic needle, deflected by an electric coil—seemingly a useless toy. Faraday reportedly answered: "Of what use is a new-born baby? Give it time to grow up."

Even Faraday could hardly have anticipated that his "baby" would grow up to become the electric motor and the electric generator, destined to change modern life completely. And the great Johannes Kepler (1571-1630) believed that his book on *Harmony in the Universe* was by far his most important scientific achievement. The book hardly survived him, is known to historians only. But his solution of presumably "less important problems" made his name immortal. How then can any man claim to know what will or will not become useful?

Science must be patient and keep an open mind; the Future will be the judge. ESP experiments certainly should be viewed with great caution and reserve. But to discard the whole problem with a few strokes of the pen is hardly the right way to deal with it either.

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BOOK REVIEWS

Psychiatry in Theory and Practice. By BEULAH CHAMBERLAIN BOSSELMAN, M.D. 150 pages, including index. Cloth. Thomas. Springfield, Ill. 1957. Price $4.00.

This is an excellent basic book for residents or for anyone wishing a brief, yet concise and non-dogmatic orientation in psychiatry. It begins with a brief review of the history of psychiatry and then goes on to discuss the neuroses, psychoses, and syndromes of brain damage. The last chapter is concerned with the functions of psychiatry and the relation of psychiatry to other sciences and to religion. The function of psychiatry, as the author sees it, is "to help them [patients] obtain the necessary freedom on which to base a way of life. It aims to set free the energies which have been tied up in blind internal struggles, thus making these energies available for more realistic uses."

Psychoanalyse und Daseinsanalytik. (Psychoanalysis and Existential Analytics.) By MEDARD BOSS, Prof. at Zurich University. 155 pages. Cloth. Hans Huber. Bern and Stuttgart. 1957. Price Swiss Francs 14.80 (About $3.40).

After a brief review of Freud's and Jung's theories and those of their students and followers, Prof. Boss devotes the rest of his discussion to Martin Heidegger's theories and their application to psychoanalysis. Heidegger's theories were set forth in *Sein und Zeit* (*Being and Time*), published in 1927. It is Boss' contention that Heidegger's work is merely an extension and development of earlier works, and is therefore not in contradiction to them. The Existential analytic technique is, he holds, far more scientific than that of its predecessors, and thereby permits a better insight into the mental make-up of the human being. For this reason, he believes this is one of the best tools that the analyst can use in his work.

In German-speaking circles, where Heidegger is better known as a philosopher than a psychologist, this book should make for a new evaluation of his work.

Rage on the Bar. By GEOFFREY WAGNER. 272 pages. Cloth. Noonday Press. New York. 1957. Price $3.50.

An interesting novel contrasts modern with rather antiquated methods of "ruling" a British colony. The old-timers are treated with satire and contempt. The author is less concerned with psychological motivations than with the thesis he wants to propagandize.

Studies in Schizophrenia: A Multidisciplinary Approach to Mind-Brain Relationships. By the Tulane Department of Psychiatry and Neurology. Reported by ROBERT G. HEATH, chairman. 619 pages. Cloth. Harvard University Press. Cambridge, Mass. 1954. Price $8.50.

This book is a report of the experiments carried out by an interdisciplinary team at Tulane. Men in the fields of psychiatry, psychology, physiology, neurology, biochemistry, neurosurgery contribute reports to the testing of a new theory of schizophrenia.

In the first section the book discusses the theoretical framework of the study. The contention is that behavior becomes more integrated as one moves up the phylogenetic scale; and in the present theoretical formulation, behavior is considered in terms of the dynamic interaction between higher and lower integration levels. The hypothesis is further stated that a functional circuit exists in the brain which facilitates mental activity and bodily processes and another which inhibits such activity. The evidence is based on animal experiments applied to human patients, with schizophrenia considered a disorder of the lower levels of integration based on clinical observations which indicate impairment of lower thought levels.

The second section of the book deals with the actual experiments that have been done with animals. It describes how electrodes have been inserted into the brains of animals and how resulting metabolic changes have been recorded. Following this, is the rest of the report, concerning experiments with schizophrenics on whom mild electric stimulation was used with favorable results. This contains all the biochemical, psychological, and clinical data.

Finally, there are sections dealing with case reports. Because the basic hypothesis is so broad, one soon finds inconsistencies, but one must also admit that some interesting insights are elicited. If some of this work concerning the disturbances of cortical-subcortical inter-relationships in the schizophrenic processes can be confirmed and clarified, perhaps we can find more satisfying therapeutic techniques.

Management of Addictions. EDWARD PODOLSKY, M.D., editor. 413 pages including index. Cloth. Philosophical Library. New York. 1957. Price $7.50.

The management of drug and alcohol addiction is one of psychiatry's most difficult, and as yet most unsuccessful, therapeutic problems. Many types of therapy are described by the contributing authors—individual psychotherapy, drug therapy, conditioned-reflex therapy, group psychotherapy. Most of the contributors emphasize that a combination of therapies is the most effective in the rehabilitation of the alcoholic.

Pharmakopsychologie und Psychopathologie. (Psychological Effect of Pharmaceutical Substances.) By WOLFGANG DE BOOR. 291 pages. Cloth. Springer. Berlin. 1956. Price 39.60 Deutsche Marks (about $9.50).

This book is probably the most comprehensive collection available of material bearing upon various pharmaceutical substances, and their psychological effects upon introduction into the human body. It is an extremely useful reference work not only because of its completeness, but because it is arranged very well. There are such groupings as "Substances with predominantly tranquilizing effect upon the central nervous system," and "Those with a stimulating effect upon the central nervous system." Those affecting the autonomic nervous system are also discussed. The book is up-to-date. It is not in any sense an original work of research. Its chief value is that it has combed existing literature and brought together in one place, and in a convenient form, all that is commonly known about a great number of pharmaceutical substances and their psychological effects.

Raquel. By LION FEUCHTWANGER. 433 pages. Cloth. Messner. New York. 1956. Price $4.95.

As is typical of Feuchtwanger's many novels, the author chooses an interesting period for his research, does a painstaking job, and falls down on his psychology. The power motive in reality explains nothing; still this is Feuchtwanger's explanation of his dramatis personae. This time, the twelfth century in Spain is depicted, with the love story of Alfonso VIII of Castile and "the Jewess of Toledo." Her father, the king's secretary of finances, is the central figure. His attempt to prevent war between the Moslems and Christians in Spain allows him to sacrifice his daughter and son. His aim is also to help French Jews persecuted during the Crusades. But these noble motives are totally unexplained psychologically. A writer of merit should not assume that the motivation is "self-evident."

Personal Problems and Psychological Frontiers. Professor JOHNSON E. FAIRCHILD, director of adult education and chairman of the Cooper Union Forum, editor. 320 pages including index. Cloth. Sheridan House. New York. 1957. Price $4.00.

This book is composed of 18 lectures that were given by authorities in psychiatry, psychology, anthropology and sociology at the Cooper Union Forum in New York City. Most of the articles are concerned with aspects of mental health or mental mechanisms. The topics are provocative and pertinent. The reader does not require a broad knowledge of psychiatry, as these lectures were addressed to lay people.

Faith, Reason and Modern Psychiatry. Sources for a Synthesis. FRANCIS J. BRACELAND, M.D., ScD., F.A.C.P., editor. 294 pages. Cloth. Kenedy. New York. 1955. Price $6.00.

That religion and psychiatry should get together for the good of society and, especially, for the mentally ill is a wish in which everyone joins. In many recently published books with such an aim, the idea seems principally to be to have the psychiatrists join the theologians' "camp." This is not to be accomplished easily, since the problem does not seem to be so much the lack of agreement on concepts as it is the lack of understanding when psychiatrist and theologian talk about the same thing in different ways. Their meanings are the same but the words are not. It is improbable that the theologians mean what they seem to imply; but some give the impression that the psychiatrist and the psychologist should investigate the problems of emotional living and then turn the information over to the theologians who will treat the patients, except, of course, the psychotics, whom the psychiatrist can have. This may be put bluntly, but it is implied in the foreword of this book—written by the Rev. John LaFarge, S.J. Perhaps there is fear in the minds of the theologians that psychiatry will destroy moral responsibility.

In spite of all this comment, however, this book is a very fine one. Every contributor has written in a scholarly style and has presented many extremely good speculations which every seriously-minded person should consider. This reviewer obtained so many good ideas from the book that he read many parts of it three or four times, gaining new ideas each reading.

In his introduction, Dr. Braceland looks at psychiatry—"today and tomorrow." He believes that where, formerly, one studied man's problems, today man is the problem and, failing to understand himself, man is looking more to the psychiatrist to clarify his ideas of reality. However, Dr. Braceland calls for a multidisciplinary approach.

"The sort of man one is may depend on the sort of philosophy one has," writes Dr. Rudolf Allers. A man "sees the world and himself and, consequently, his place in and relations with the world in the light of his philosophy. . . and we shall not understand him until we can see things his way."

In an existential vein of thought, Dr. Juan J. Lopez Ibor describes the changing times and states, "It is easy to blame the problem on the constitution of the individual. There is no doubt that this has some influence; but historical circumstances in the personal life of the individual also exert an influence. Life is lived as a continuity, and the experience of anxiety is a special form of the threat of disruption of this continuity."

Discussing religious faith, Dr. Gregory Zilboorg says, "The consensus

of opinion of those to whom religion is not a neurosis to be cured, and psychology not a devilish concatenation to turn away from, tends to the conclusion that while psychology can throw a great deal of *psychological* light on religious experience, and religious faith may enrich one's psychological functioning, *psychology as a scientific discipline can shed no light whatsoever on the relations between man and God.* . . . The above conclusion seems to be so simple, so true and so unassailable, yet the conflict between religion and psychology does seem to continue, and does seem to serve to obscure old issues and befog new ones. . . . Because the scientific psychologist knows or may know a great deal about the psychology of spirituality, it does not mean that he necessarily knows anything about spirituality itself. Conversely, because the religious thinker may attain some really important psychological truths, it does not mean that religion should reject psychology as unnecessary.''

Dr. Karl Stern believes, ''The therapist must find his way between two pitfalls: on the one hand the fallacy of 'angelism,' on the other the fallacy of debunking spiritual values.'' Vincent E. Smith, Ph.D., ''. . . proposes the Aristotelian science of the soul, as transformed and perfected by St. Thomas Aquinas, as the most tenable basis for an organic, humanistic study of man.'' Dorothy Donnelly, M.A., studies man and his symbols from an anthropological viewpoint. Dr. Pedro Lain Entralgo discusses illness as it may be looked at from a theological aspect.

The Rev. Noel Mailloux, O.P., is anxious to grasp all information from biological, psychological and social sciences but feels that the results of research must be expressed in language acceptable to the theologian. He is, also, anxious to have the sciences find ways to cause the individual to accept the dogma of religion but ways to change this dogma to meet modern living are to be avoided—the spirit is right—the human is wrong. He seems to say, ''Tell us what to do, but let us do it. We will do a better job.''

Finally, the Rev. Jordan Aumarn, O.P., S.T.D., discusses whether or not sanctity is possessed by the emotionally ill.

In The Time of Greenbloom. By Gabriel Fielding. 407 pages. Cloth. Morrow. New York. 1957. Price $4.75.

A somewhat inane novel is written by a British physician under a pseudonym. It is impossible to relate the contents; confusion reigns. As far as one can make out, two themes are paramount: the misfortunes of an adolescent innocently involved in a murder, and the story of an eccentric (Greenbloom), whose picture is totally distorted. There is also a good deal of criticism of the British school system and a few anti-Semitic statements for good measure.

Psychoanalysis: Evolution and Development, A Review of Theory and Therapy. By CLARA THOMPSON, M.D. with the collaboration of PATRICK MULLAHY. 252 pages including index. Paper. Grove. New York. 1957. Price $1.45.

This book is admittedly biased toward the cultural interpersonal school represented especially by Sullivan and Fromm. In spite of this the ideas of Freud, Adler, Jung, Rank and others are presented clearly and fairly. In fact this is an excellent elucidation of Freud's theories, although the criticism that Freud neglected cultural factors is sometimes far from proved. There are many statements such as "recent evidence shows that. . ." and ". . . has been shown by modern research to be. . ." without quoting the sources, or giving the references. Maybe these unquoted sources proved to Dr. Thompson's satisfaction what they purported to prove, but they do not necessarily convince others. Apart from this minor criticism, the book is highly recommended as one of the best available reviews of the history of psychoanalysis and of the ideas of the current psychoanalytic schools.

The Practice of Dynamic Psychiatry. By JULES H. MASSERMAN, M.D. 760 pages. Cloth. Saunders. Philadelphia. 1955. Price $12.00.

In his preface, Masserman states: "In a text entitled PRINCIPLES OF DYNAMIC PSYCHIATRY, published nearly a decade ago, the author attempted to correlate various physiologic and psychologic concepts of behavior into a comprehensive system, termed BIODYNAMICS. . . . The present volume extends the applications of BIODYNAMICS to clinical psychiatry, and to the theory and practice of medicine and its specialties." In doing just this Dr. Masserman has written a very important text, which should be followed closely by all students of psychiatry. The book is not only informative; it is easy to read, contains many illustrative case records, and gives the reader the impression that Dr. Masserman is talking directly to him. There are five "Parts" and appendices.

Part I describes objectives, rationale and the ways of talking to patients, formulating questions and evaluating patients' problems without making a person just another case record. In collaboration with Julian Pathman, Ph.D., and Donald Stieper, Ph.D., the author clearly describes all of the various psychodiagnostic tests.

Part II evaluates, in a dynamic fashion, the clinical syndromes. Here the author avoids a confusion of terminology, so that the average physician will understand the various syndromes, yet not get confused with distinct classifications. Masserman does, however, follow fairly closely the revised standard nomenclature of 1952.

Part III tells the psychiatric student how to write up hospital records,

progress notes, discharge summaries and reports to referring physicians, illustrating with actual case records. One chapter describes and illustrates methods of writing reports for nonmedical persons; another takes up reports to the court, to attorneys and to insurance companies.

Part IV, "Clinical Dynamics of Affect and Self," discusses the various concepts of the self and of affect, concepts which, although theoretical, are important to the understanding of psychiatric dynamics and the better comprehension of the mentally ill patient's distorted language.

Part V pertains to psychotherapy and points out its historical development, the inroads made by metaphysical theory, the current schools of analytic therapy, and the concepts of "biodynamics." It also takes up drug therapy, hypnosis, group therapy, military psychiatry and social readaptation in behavior disorders.

The appendices consist of a condensed outline for the psychiatric examination, the tabulation of psychiatric disorders according to recent diagnostic manuals, a summary of data on alcoholism, a curriculum for the training of the psychiatrist and, finally, a history of the mental hygiene movement. The book also contains 48 pages of biblography, an index of personal names and an index of subjects.

The Hill of Venus. By MERRILL MOORE. 71 pages Cloth. Twayne. New York. 1957. Price $3.00.

In *The Hill of Venus* Merrill Moore goes with simple directness to the center of affairs. This reviewer can think of no other modern poet who would even have dared to write under his title, and his unconventional sonnets are strictly to the point. They are stark, violently scratched etchings—almost caricatures—portraits of persons involved in the physical aspects of love. There is, for example, a sonnet on the man who has a fantasy to rape every woman that he meets; one on a "reasonably successful Hollywood marriage," concerning which there will be speculation as to identification; one on a writer at a cheap summer hotel; another on an event on a transcontinental train, and still another on "the praying mantis sort of wife." There are psychoanalytic-philosophic notes on such matters as nature and her memory, Mr. Carp's widowerhood, money in pornography, and the concluding poem, "I know all kinds but their ends are much the same"—and there is no play on words in "ends." *The Hill of Venus* contains some of the psychoanalyst poet's sharpest analyses and best verses. This reviewer thinks that anyone with an analytic orientation will be amused and instructed by it. He thinks it very probably the best of Moore's work to be published so far. With Dr. Moore's recent death, it may, unfortunately, be his last publication.

A Dictionary of Contemporary American Usage. By BERGEN and CORNELIA EVANS. 567 pages. Cloth. Random House. New York. 1957. Price $5.95.

A Dictionary of Contemporary American Usage will inevitably be compared, as a desk volume, to Margaret Nicholson's *Dictionary of American-English Usage* (reviewed in a previous issue), which is a revision for Americans of Fowler's standard work on English usage. It is an oddity that Bergen Evans and the reviser of Fowler both have wide experience with British, as well as American, English; and it is a coincidence that their books should appear almost simultaneously. Either, or preferably both, can be most heartily recommended for desk use for any American writer.

The reviewer thinks that if there is to be a preference, the Evans' dictionary may have a very slight edge, as it is based primarily on American usage rather than being a revision for Americans of a British book, however excellent. The Evanses also have drawn heavily on Jespersen for questions of grammar and structure of the language. This is a matter for which the reviewer would be glad to cheer, although some of the discussion, for instance the section "Adjectives as Adverbs," is not easy for persons trained in the old Latin-grammar tradition to follow. There are other somewhat perplexing entries. This reviewer, for instance, was trained in America to use "shall" and "will" in a way the authors appear to consider exclusively British. But the book on the whole is clear, incisive and inspiring. It goes after clichés with a battle ax. Its section on split infinitives is gorgeous. It has a very enlightened discussion of what is meant by "standard English."

Like the Nicholson revision of Fowler, *A Dictionary of Contemporary American Usage* covers a number of topics in the form of short essays, the split infinitive, for instance; and there is a delightful discussion of "gamesmanship"; it would be useful if these were listed, as in the Fowler revision, in a short contents table or index.

The specialist, of course, will find his opportunities to cavil at this work. There is a neat section on "Freudian English," but why did the authors put "inferiority complex" therein? And why, in distinguishing between meanings of "sanitarium" and "sanatorium," did they fail to note the usual medical contention that "sanitarium" is altogether incorrect, as a misspelling of "sanatorium," which is derived properly from "*sanare,*" Late Latin, "to cure"?

It will interest purists that the authors not only find "like" permissable for "as," though not for "as if," but cite highly respectable literary usage in justification. So, one must accept, "Bumbums taste good, *like* a do-funny should," though one does not have to like it; Tennyson

didn't; the Evanses report his mistaken rebuke of Prince Albert—in the presence of Queen Victoria—for using it.

There is support, too, for some of America's most colorful idioms. "The cat wants out," says this dictionary, is "standard English" in parts of the United States; and the reviewer will hereupon bow out with expressions of hearty approval. When all disagreements are noted and all cavilling is entered on the records, this is still a volume to be recommended strongly to all writers, including (or perhaps especially) scientific writers.

Counseling and Psychotherapy With the Mentally Retarded. CHALMERS L. STACEY and MANFRED F. DEMARTINO, editors. 478 pages. Cloth. Free Press. Glencoe, Ill. 1957. Price $7.50.

The subtitle of this book describes the contents quite readily. It is a "Book of Readings," varied not only in content but in approach and thought. It contains some 50 articles by as many authors, most of them researchers in the field of mental deficiency. The book starts at a very proper place with a fundamental issue. This is the pros and cons of psychotherapy with the mentally retarded. There are six articles in this first section by five different authors. Each seems to end up saying that the thing that is required most is research.

With this initial approach digested, one feels at least that the necessity for such a book is justified. From there, the many authors discuss the various approaches to working with mentally retarded people; and perhaps the most significant material is in Chapter 9 which deals with counseling with parents, since it is this reviewer's opinion that this is where psychotherapy must begin if we are to help mentally deficient children. The book also merits consideration if for no other reason than as a reference work containing in convenient form the basic thinking and writings of many experts in this area which have previously been available only in widely scattered publications.

The Late Risers. By BERNARD WOLFE. 303 pages. Cloth. Random House. New York. 1954. Price $3.50.

Bernard Wolfe, who wrote the powerful and depressing novel *Limbo,* pictures a handful of Times Square characters in *The Late Risers.* The character drawing is excellent; anyone who knows that segment of New York will recognize the types. Wolfe has also written a fine collection of bawdy and entertaining incidents here, but as a novel the book does not quite come off. The virgin prostitute has been done before and seldom convincingly, although one can actually find her in case histories. *The Late Risers* is nowhere near the standard of *Limbo.*

Best Cartoons of the Year 1957. LAWRENCE LARIAR, editor. Unpaged. Cloth. Crown. New York. 1957. Price $2.95.

Best Cartoons From Abroad 1957. LAWRENCE LARIAR and BEN ROTH, editors. Unpaged. Cloth. Crown. New York. 1957. Price $2.95.

Lariar's collection, *Best Cartoons of the Year 1957*, and Lariar and Roth's collection of foreign cartoons combine to make an annual joyous event. If there is a pleasanter way to survey present-day surface psychopathology, this reviewer hasn't encountered it.

As is usual, the psychiatrist and the psychoanalyst are the targets of much of the fun. The frontispiece of the American collection is a neat piece of work from that late-lamented journal, *Collier's*, involving a well-developed young woman and two psychiatrists who are reaching the decision that she is not all there "mentally, of course." The medical profession as a whole takes a good share of the ribbing in both collections. It is the American artists, however, who are psychiatry-conscious. Of 15 or more American medical cartoons, half a dozen are strictly psychiatric, including the psychiatrist who suggests clobbering the unruly brat, and the analyst whose patient with a "superiority" complex ousts him from the couch. There is a priceless cartoon of television in the operating theater, with Dr. So-and-so, Number so-and-so replacing another character in the line-up. That one is from the staid *Journal of the American Medical Association*. And it is *Today's Health* which comes through with: "There is nothing seriously wrong with you—but for a while I suggest you lay off sweets, rich foods, spicy seasonings and books on self-analysis."

Except for a delightful British version of occupational therapists who have overdone basket-making, most of the foreign medical subjects concern hospital and general practice. Italy contributes a beautiful nurse with a patient whose wife finds him worse off today than yesterday: He didn't have those "black eyes" yesterday.

Either of these books would, as is usual, make a splendid Christmas gift. Both of them are light-hearted versions of modern folly and the lighter varieties of psychopathology, ranging from overindulging Junior to the two jailbirds who think today's young people are no worse than young people used to be. Either book would be a fine addition to a doctor's waiting room.

On the Nature of Man. By DAGOBERT D. RUNES. 253 pages. Cloth. Macmillan. New York. 1955. Price $3.50.

The subtitle of the book, "An Essay in Primitive Philosophy," should be reversed: "A Primitive Essay." The conclusions are banal and "primitive philosophy" has not yet discovered the unconscious.

The English Penal System. By WINIFRED A. ELKIN. 277 pages. Paper. Penguin. 1957. Price 85 cents.

A lay writer with good intentions, and little knowledge of psychiatric facts (though friendly towards psychiatry), attempts a summary of the present-day penal system in Britain. British penology has to fight with remnants of barbaric laws (around 1800 there were 200 offenses punishable by hanging); the author even understands that punishment per se does not prevent crime. How uninformed she really is about the newer psychiatric developments, shows in this statement. "There are also certain people for whom danger adds spice to life. It is a type not limited to the criminal world. The man who goes big game shooting would doubtless find it less exciting if it were safe, and for some of the younger men burglary has just this attraction. The risks of punishment are a goad, not a deterrent." After the word, "attraction," there is an asterisk, pointing to this footnote: "This analogy is not my own but I cannot remember where I read, or more probably heard, it. I tender my apologies to the real author."

Four Worthies. By WALLACE NOTESTEIN. 243 pages. Cloth. Yale University Press. New Haven. 1957. Price $4.00.

The author, Sterling professor emeritus of English History at Yale, takes as his cue a statement in *The Times Literary Supplement*: "What are we to make of anyone who lived before 1700?" meaning that "we cannot hope to understand those who lived earlier." The author tries to remedy the situation by describing four personalities: John Chamberlain, Anne Clifford, John Taylor, Oliver Heywood. A good deal of research is accomplished—but that is all. The "common man of the early seventeenth century is one of whom we know little and about whom we are most curious." The curiosity remains—the book gives few or no clues. Moreover, by totally omitting psychological data the author makes his book not only incomplete, but regrettably boring.

The Normal Child. By C. W. VALENTINE. 279 pages. Paper. Pelican. New York. 1956. Price 85 cents.

A rather naïve book of the "reassuring" type is written by a British psychologist. The author denies, or minimizes, everything that dynamic psychiatry has discovered. His great bogey is the Oedipus complex: "First we may recall that the psychologists Stern, C. S. Myers, W. McDougal, each with three, four, or five children, on whom they made many precise observations, were all opposed to Freud's idea of an Oedipus complex. My own observations on five children led me to the same conclusion." Valentine's court of last resorts was—a questionnaire.

Current Therapy 1956. Latest Approved Methods of Treatment for the Practicing Physician. HOWARD F. CONN, M.D., editor. 632 pages. Cloth. Saunders. Philadelphia. 1956. Price $11.00.

This annual volume should be added to every doctor's library or placed on his desk. It is a quick-reference type of book permitting the doctor to easily obtain or check the latest forms of treatment of most physical diseases.

Doctors who have the previous year's volume are reminded of the custom of the editor to rotate contributors so that opinions and methods of treatment vary each year, thus making each volume a new book rather than a revision.

Current Therapy 1956 has 15 sections which condense briefly the treatment of infectious, allergic, venereal and skin diseases; the treatment of disorders of the cardiovascular, the digestive, the endocrine, the urinary, the respiratory and the nervous systems; treatment of blood, metabolic pathology and the treatment of poisoning from chemical or animal agents. In the appendices, are a table of the metric and apothecaries' systems, tables for making percentage solutions and a roster of the drugs mentioned in the volume, so that the reader can inform himself of the manufacturer, the quantity of drug per dispensing unit, etc.

Experimental Psychology. By IVAN PETROVITCH PAVLOV. 653 pages. Cloth. Philosophical Library. New York. 1957. Price $7.50.

Experimental Psychology by Ivan Pavlov is a classic that is not read in one night. It contains most of the basic writings of this noted Nobel Prize winner. One takes immediate interest in the initial pages, which discuss the significance of the author's works, and also in the short autobiography which can be viewed as a short personality study of the man. From a psychological point of view the writings in Chapter 12 entitled "Fragments of Statements at the 'Wednesday' Gatherings" are of maximum interest. Here Pavlov relates some of his struggles with the "Idealists," and he levels his criticisms against Yerkes, Koehler and Sherrington. Here is the psychology most researchers are familiar with. The whole book will certainly find a place among the experimentalists in psychology.

Smoking and Its Effects. By SIDNEY RUSS, C.B.E., D. Sc. 144 pages including index. Cloth. Basic Books. New York. 1957. Price $5.50.

This is an interesting book about the history, abuses and enjoyment of smoking. The book also discusses whether there is any connection between lung cancer and smoking. The conclusion is ". . . the case for cancer of the lung being produced by smoking is Not Proven."

Psychiatric Research Reports of the American Psychiatric Association. 1. Pharmacologic Products Recently Introduced in the Treatment Of Psychiatric Disorders. WILLIAM T. LHAMON, consulting editor. 2. Approaches to the Study of Human Personality. NATHAN S. KLINE, consulting editor. No. 1, 152 pages; No. 2, 176 pages. Paper. American Psychiatric Association. Washington, D.C. 1955. Price $2.00 each.

These are the first two psychiatric research reports established by the American Psychiatric Association as an additional medium for the publication of articles reporting progress in research, such as papers presented at American Psychiatric Association regional conferences. The symposia in these first two volumes represent authoritative research and theory, with discussions by outstanding workers in the biological, cultural, psychiatric and psychologic fields—a cross-discipline approach.

Research Report 1 is made up of papers presented at the Regional Research Conference of the American Psychiatric Association at the University of Texas in February 1955. It is devoted entirely to research with the new tranquilizing drugs. Most of the papers deal with the uses of chlorpromazine and reserpine, although reports on some others are presented.

Report 2 presents the papers of the American Psychiatric Association Regional Research Conference held in Mexico City under the joint auspices of the American Psychiatric Association and the Department of Psychiatry of the National University of Mexico in March 1954. This volume presents various approaches to personality study, such as the psychoanalytic, biochemical, cultural, and semantic. Again, a cross-discipline approach is used in an effort to formulate a general, comprehensive theory of personality. This effort has been gaining prominence, and these papers are a further contribution to research in this challenging and complex field.

Closed Ranks. By ELAINE and JOHN CUMMING. 192 pages. Cloth. Published for the Commonwealth Fund. Harvard University Press. Cambridge, Mass. 1957. Price $3.50.

A sociologist and a psychiatrist attempted to change the attitudes of a small Canadian community toward victims of mental illness by an extensive educational campaign. The results were negative. The authors blame themselves (it seems, unjustifiably), but console themselves: "We believe we have made one crude stroke on a nearly empty canvas; we hope it may inspire others to add more so that eventually a coherent picture may emerge."

The Writing Road to Reading. A Modern Method of Phonics for Teaching Children to Read. By ROMANDA BISHOP SPALDING. 238 pages. Cloth. Whiteside Incorporated, and William Morrow. New York. 1957. Price $4.00.

With some 20 years of professional practice as a grade-school teacher and thorough training at the University of Illinois and Columbia, Mrs. Spalding, in her own words, has attempted "to present in complete and workable detail the Unified Phonics Method for teaching children correct and accurate speech, writing, spelling, and reading."

Discarded are many and sundry well-aged and well-loved methods of the early-grade teacher. The use of "families" of words is frowned upon, e.g., the "all" family, "tall, ball, call" etc., since "all" has nothing to do with its "family." Games, such as picking out small words from big, are discarded because of their lack of logic, ie., "cat" has nothing to do with "catastrophe."

The method is simple. The child inevitably learns some speech before entering school. He is taught that there are 69 phonograms in the English language and he is required to learn them. After these are committed to memory, he no longer is at the mercy of his memory for words by sight. Since he has mastered words by sound, spelling is simple. He can place words on paper; and, by reversing the procedure, he can read. Never, save for the few oddities of the language, must he learn sight reading.

"Bilateral" sight reading—reading some words right to left and some left to right—is discussed, and a method for alleviation is described. It is pointed out by the author that a child with such a problem is entirely at sea as far as "word reading" is concerned. Her "Unified Phonics Method" is supposed to be the answer to the problem.

The book is constructed as a text and as such is thorough, concise, easily read and extremely worth while, not just for the teacher but for the parents of children, adolescents and adults themselves who find they are still unable to read well.

You Can Stop Worrying. By SAMUEL W. GUTWIRTH. 93 pages. Cloth. Regnery. Chicago. 1957. Price $3.00.

It has been said that there are books that can be classified only by one gesture: a shrug of the shoulders. The present volume belongs in this category. It offers a "practical method for quieting the mind," which is "by relaxing your muscles." The reasoning is that, because muscular tensions accompany mental tensions, "by relaxing the muscle tension involved in worry, you will no longer be worrying." That neat confusion between cause and effect is the crux of the book.

Psychosurgery and the Self. By MARY FRANCES ROBINSON, Ph.D., and WALTER FREEMAN, M.D. 114 pages. Cloth. Grune & Stratton. New York. 1954. Price $3.00.

Dr. Robinson used a test procedure to study 51 prefrontal lobotomy patients. All were studied more than four months post-operatively. The operation results were all fair to good. As controls, 17 former state hospital patients who were similar in age, diagnosis and length of illness to the psychosurgery patients, and who had improved without psychosurgery, were studied similarly. Tests were in the form of investigative interviews where everything that the patient said was recorded and studied.

"The hypothesis that ultimately appeared plausible may be here stated quite simply. . . Psychosurgery changes the structure of the self through reducing the capacity for the feeling of self-continuity. . . The most profound disorientation occurs in the area of the self. After operation these people are much interested in satisfying their desires, but they seem to be entirely uninterested in themselves as persons. . . Their wants are vivid, their tempers uncertain, and the whim of the moment tends to rule them. . . Most of us, as observers of our own behavior, occasionally at least, don't like what we see and feel disturbed about it. . .

"In all these cases and in many others not cited, there is a recognition of personal shortcoming that is quite different from insight. It is rather complacent recognition that includes acceptance but not responsibility. . . Postlobotomy patients appear different from us and like each other in just this respect. They appear to lack (though in varying degrees, to be sure) any strong feeling of self-continuity. . . Self-continuity is much more intimate and personal than memory, and a person with reduced self-continuity will not have much anxious self-concern and will not be much interested in his past or distant future. . . Since he is not aware of himself as continuing and changing, with responsibility for the changes, he is interested neither in self-analysis nor in the opinions other people have of him, opinions that once might have been vital to his self-esteem."

Husbands and Pregnancy: The Handbook For Expectant Fathers. By WILLIAM H. GENNÉ. 127 pages including index. Cloth. Association Press. New York. 1956. Price $2.00.

To many a man, the pregnancy of his wife is something that is mysterious, bewildering and even shameful. This book attempts to enlighten the husband and thus make it easier for him, his wife, and children, if there are any. There is advice on how the husband can be of practical aid before and after delivery. There are many good points about handling situations that develop after mother and baby come home.

Introduction to Medical Psychology (for Physicians and Psychologists). By Prof. Dr. Med. GEORG DESTUNIS, Physician-in-Chief of the Neurological Division of the Hospital at the Friedrichshain-Berlin. XI and 218 pages, including 20 pictures and an index (and a few text references). Cloth. De Gruyter. Berlin. 1955. Price DM22.—.

Introduction to Medical Psychology is a remarkable compilation in German, covering psychological medicine, psychosomatic medicine, psychological methodology, clinical and social psychology in Europe today. But one must be completely familiar with the work and the terminology of Friedrich Kraus (*Tiefensperson*), E. and W. Jaensch (*Grudzüge einer Physiologie und Klinik der psychophysischen Persönlichkeit*), of E. Kretschmer, L. Krehl and von Weizsacker to be able to appreciate the detailed and minute work of the author. He is not entirely unfamiliar with contemporary American special literature, but unfortunately very little of its conceptions is integrated in this work. Even so, the author can only skim over the tremendous amount of material that he aims to cover in little more than 200 pages. The consequence is very heavy, tedious reading, unstimulating and rather tiresome. The trained German specialist will find the book very useful as a refresher and reference work. The American reader—if able to read it at all—can use it to familiarize himself with many important pre-Nazi medical trends in Europe. Scattered through the book as footnotes (instead of organized author and material index) are bibliographic references, a method which makes the book less useful for the American reader than it could be.

Theory and Treatment of the Psychoses. Some Newer Aspects. EDWIN F. GILDEA, editor. 119 pages. Cloth. Washington University Studies. St. Louis. 1956. Price $2.00.

This book contains the papers which were given at the dedication of Renard Hospital, the new psychiatric unit for the Washington University School of Medicine, on October 10, 1955.

Psychiatric units in general hospitals are discussed by Alan Gregg as advancements in the understanding between psychiatry and medicine in general; as giving the mental patient better access to all medical specialties. "I am sure also that putting psychiatry in a general hospital will result in friction, but in a better eventual balance between psychiatry and the rest of medicine than will ever come from leaving it isolated and ignored."

Stanley Cobb, Alfred H. Stanton, John Whitehorn, F. C. Redlich and B. F. Skinner are the other contributors; George Saslow and the editor review and criticize the papers.

The Family in Psychotherapy. By C. F. Midelfort, M.D. 203 pages including index. Cloth. Blakiston (McGraw-Hill). New York. 1957. Price $6.50.

The author emphasizes the fact that one person in a family constellation often becomes mentally ill as a result of the interactions of the family group. From this, he concludes, and justifiably so, that effective therapy must include the family or at least part of it. Otherwise, the same pernicious reactions that precipitated the illness are going to face the patient when he leaves the care of the psychiatrist.

The author places great emphasis on the patient learning to love and to accept love. To help accomplish this he recommends that the therapist have bodily contact with the patient. "It is possible for the therapist to show his feelings for the patient by sitting close to the patient, by touching and being touched by the patient and by giving comfort in various ways, such as having the patient sit in his lap or holding the patient like a baby." For most therapists, the wisdom of this approach is questionable for many reasons. The main one is that most therapists would not feel comfortable with patients on their laps. (Whether this is for conscious or unconscious reasons, or whether, as the author suggests, it is because the therapist is afraid of his own schizophrenic reactions, is beside the point.) Possibly some therapists could hold patients on their laps without becoming so emotionally involved as to blur their judgment and objectivity, but most could not. Perhaps with some of the more regressed patients this lap-holding approach is called for, but with others it is fraught with danger for patient and therapist.

Sexual Hygiene and Pathology. By John F. Oliven, M.D. 462 pages. Cloth. Lippincott. Philadelphia. 1955. Price $10.00.

The author, a psychiatrist, attempts a manual for physicians with less than moderate success. His eclecticism is an obstacle at many points. It is not universally accepted, for instance, that male homosexuality is due to a "congenital predisposition, and, 'grafted' upon this, an unfavorable personality development." It is also doubtful that the Oedipus complex "is believed to be less intense in girls." And so on and so on.

Unsettled Children and Their Families. By D. H. Scott. 234 pages. Cloth. Philosophical Library. New York. 1956. Price $6.00.

The author, research fellow at the Institute of Education, University of Bristol, England, attempts to answer the question, "which of our parental inadequacies matter little and which matter much." The answers are to help case workers. Unfortunately, they are purely descriptive, and contribute less than little.

Progress in Neurology and Psychiatry. An Annual Review. Volume X. E. A. SPIEGEL, M.D., editor. 629 pages. Cloth. Grune & Stratton. New York. 1955. Price $10.00.

It is difficult to imagine that so much information can be given in such comparatively small space as one finds in a book of this sort. It is so nicely condensed that one often finds several references in one small paragraph, yet continuity and readability are not sacrificed. As a result this volume, like previous ones, contains a tremendous amount of information.

The authorities who have contributed their part are too numerous to mention. The book is divided into: one-third, clinical psychiatry; one-third, clinical neurology; one-sixth, neurosurgery; and one-sixth, basic science relating to neurology and psychiatry. Over 14,000 papers have been reviewed. Following each chapter there is a complete list of references. The index is extensive and specific.

A Book of Contemplation. By DAGOBERT D. RUNES. 149 pages. Cloth. Philosophical Library. New York. 1957. Price $3.00.

Dr. Runes is an extremely uneven writer. The aphorisms collected here include the original, the trite, the clever and the dull. They are also written from a sectarian point of view; and it is no service to author or reader to fail to say so in the book's title. Anti-Aryanism is not very much prettier than anti-Semitism, and Dr. Runes comes regrettably and offensively close to it; although perhaps to prove that he can belabor all alike, he abuses psychoanalysis with a compound of prejudice and misunderstanding. There are beautiful and worthwhile thoughts in this book, but it would have profited by a frankly sectarian title and somebody else to edit the author.

The Assassins. By ROBERT J. DONOVAN. 300 pages. Cloth. Harper. New York. 1955. Price $4.00.

This is an attempt at personality sketches of murderers and would-be-murderers of American presidents. Three presidents have been murdered, and four others shot at. The material collected by the author is interesting; no attempt is made at uncovering unconscious dynamics. The author believes that most of the successful and would-be assassins were psychotic.

The Man With the Cane. By JEAN POTTS. 188 pages. Cloth. Scribner's. New York. 1957. Price $2.75.

This book can hardly be called a mystery, as it is fairly obvious almost from the beginning, to anyone with even a small amount of knowledge of abnormal psychology, who the culprit is. Characterizations are excellent, and the finely sensitive writing is much above the standard of the usual who-dun-it.

Studies on Hysteria. By JOSEPH BREUER and SIGMUND FREUD. 335 pages including index. Cloth. Basic Books. New York. 1957. Price $5.50.

This famous work represents the starting point of the theory and practice of psychoanalysis. It is fascinating to follow these two pioneers as they develop the many new concepts that have revolutionized psychiatry and related fields. Breuer later withdrew much of his enthusiasm, especially when Freud began to develop his ideas of infantile sexuality and the libido theory; but Breuer's contribution to this work is important. Also in these studies, Freud demonstrates a flexibility of mind and a scientific attitude that few scientists can match.

Freud's concepts, as shown here, were developed out of direct contact with the patient. His observations were remarkably shrewd and intuitive. He purposely allowed his imagination free rein, but usually was able to disregard its wanderings if it differed too much from empirical or clinical data. These studies should be read by everyone interested in Freudian thought as they show how his ideas took form and developed. They make his later theories more understandable.

Psychocutaneous Medicine. By M. E. OBERMAYER, M.D. 430 pages. Cloth. Thomas. Springfield, Ill. 1955. Price $9.75.

An intelligent and courageous attempt is made here to cover the whole literature on psychiatric aspects of skin disorders, including the author's investigations. The author is chairman of the department of dermatology, School of Medicine, University of Southern California. The book is friendly towards psychiatry; it is regrettable that the chapter on "dynamic considerations of the psyche," is cursory and below the book's standard.

The Roads of Home. By HENRY CHARLTON BECK. 270 pages. Cloth. Rutgers University Press. New Brunswick, N. J. 1956. Price $5.00.

An interesting and amiable collection of folkloristic and realistic notes from New Jersey's past is put together with care by the author of *Forgotten Towns*. He is a conscientious historian, and comes up with some previously unreported facts, for instance the story of Washington's spy, Honeyman, whose information contributed to the victory at Trenton.

The Assistant. By BERNARD MALAMUD. 246 pages. Cloth. Farrar, Straus and Cudahy. New York. 1957. Price $3.50.

The author had some success with his first novel, *The Natural*. Now, he fails—as is so typical with the second book or play—with his second work. The novel deals with the tragedy of a Jewish grocer and is some kind of attempt at transposition to a new field of *The Death of a Salesman*.

The Tichborne Claimant. A Victorian Mystery. By DOUGLAS WOODRUFF. 479 pages including index. Cloth. Farrar, Straus and Cudahy. New York. 1957. Price $4.75.

The Tichborne Imposter. By GEDDES MACGREGOR. 288 pages. Cloth. Lippincott. Philadelphia. 1957. Price. $3.95.

The reader of late nineteenth century literature frequently comes across references to the Tichborne Claimant or more simply to the Claimant. The *cause celebre* in which he figured was one of the most fascinating and complicated legal entanglements on record. It is the story of what was either a fabulous impersonation or a fabulous miscarriage of justice. "The Claimant" came to England from Australia to declare himself a long-lost son and heir to a tremendous fortune. The aged mother whose judgment may have been impaired "recognized" him. Virtually all the other relatives repudiated him as an imposter. After sensational legal maneuvers, a jury found him to be, not Sir Roger Tichborne as he claimed, but Arthur Orton, an uneducated butcher.

The story is re-told in *The Tichborne Imposter* by Geddes MacGregor, a native of Scotland and a professor of philosophy and religion at Bryn Mawr. It is told at considerably greater length and, to this reviewer's mind, more convincingly by Mr. Woodruff in *The Tichborne Claimant*. Dr. MacGregor accepts the verdict of the court and reports the story as a straightforward, undoubted imposture. He summarizes, simplifies and gives a clear and readable story. Woodruff has his doubts. He supplies some documentation and gives an exhaustive index which MacGregor's volume lacks. Woodruff thinks that the claimant could, by no probability, have been Arthur Orton, the man the law said he was. Whether he was actually Roger Tichborne, he does not profess to know, but he agrees that if he was, he did a poor job of proving it.

The psychodynamics, the character structures and the tangle of personalities involved make fascinating reading for anybody concerned with dynamic psychology.

Mental Health and Education in Hong Kong. By K. E. PRIESTLY and BERYL R. WRIGHT. 97 pages including index. Paper. Hong Kong University Press. 1956. Price $1.20.

This is an interesting book composed of a series of lectures which gives the reader some idea of the problems in promoting a mental health program in Hong Kong. Many are the same as those faced here with, of course, many cultural differences. Some of the lectures are concerned with normal and abnormal children and their emotional conflicts. These are excellent basic discussion for nurses, social workers and teachers.

Man: His First Million Years. By ASHLEY MONTAGU. 249 pages including index. Cloth. World. Cleveland. 1957. Price $3.75.

In the author's preface Dr. Montagu expresses the belief "that anthropology should form the core of the educational curriculum at all levels, grammar school, high school and college." This reviewer happens to be in hearty agreement, and he is glad to report that *Man: His First Million Years* is an excellent primer of anthropology. He would rate it at the high school rather than the college level and thus thinks it is admirably adapted for reading by anybody whose education has not included the subject.

Dr. Montagu covers both physical and cultural anthropology, with some philosophizing as to the significance to the race of what he reports. This reviewer thinks that the book would have been improved if the author had made note that some of the material he sets down as if all authorities were in no doubt on the subject is, in fact, debatable. He does, however, refrain from undue emphasis on his favorite themes—co-operation in evolution and the superiority of woman. There is a good index and a too-brief but well-chosen bibliography for readers who want to follow the subject further.

The Hostile Mind: The Sources and Consequences of Rage and Hate. By LEON SAUL, M.D. 211 pages including index. Cloth. Random House. New York. 1956. Price $3.50.

This is an interesting and instructive book. It is written with a minimum of technical jargon. The author is quite aware of the complexity of the sources of hostility and the difficulties in its mitigation and prevention. Therefore, no simple panacea is offered.

It cannot be denied that hostility is one of society's important problems when it is so much in evidence in these days of racial hate, revolutions and "cold" wars. The need for corrective measures becomes imperative when this hostility can be expressed by the use of atomic bombs —with the possible extinction of the human race.

The author suggests a multi-disciplinary study of hostility by social scientists. He argues for the dissemination of all that is presently known about it. This book is a beginning toward that goal.

The Trail of the Dinosaur and Other Essays. By ARTHUR KOESTLER. 253 pages. Cloth. Macmillan. New York. 1955. Price $3.50.

A collection of 18 essays written by the famous anti-Communistic author ranges in topic from politics, to science fiction, and from the future of the novel to the "anatomy of snobbery." Koestler is witty, perspicacious, belligerent; his formulations are pointed, sometimes brilliant.

Fads and Fallacies. In the Name of Science. By MARTIN GARDNER. 363 pages including index. Paper. Dover. New York. 1957. Price $1.50.

Fads and Fallacies is a paper-covered, second revised edition of a useful volume formerly entitled *In the Name of Science* and reviewed in this QUARTERLY in April 1953. In the years since, Mr. Gardner has revised and amended what was an excellent primer of crank scientific and pseudo-scientific literature. This reviewer thinks it is still regrettable that he is continuing to list such people as Korzybski, Moreno and Wilhelm Reich among his presumed pseudo-scientists. Whatever may be said of Reich's more recent work, his early work was of outstandingly high quality; and neither Korzybski nor Moreno deserves to be included in such a list. The same observation attaches even more emphatically to the discussion of J. B. Rhine, although Gardner makes a few apologetic qualifications here. Providing that somebody is around to point out its drawbacks, this should be a very useful volume, however, in libraries of schools of nursing or even medical schools. There are some splendid examples of that dangerous character, the paranoid scientist.

The Three Worlds of Albert Schweitzer. By ROBERT PAYNE. 246 pages. Cloth. Nelson. New York. 1957. Price $3.50.

Here is the best biography we have so far had, of Albert Schweitzer. The author, an able writer, gives a vivid portrait of the man, against the background of his three worlds, theology, music and medicine. The book should be of special interest to psychiatrists and doctors in general, for it deals particularly with Schweitzer, as the doctor of Lambarene. Indeed, the volume should be in every library.

Youth in a Soundless World. By E. S. LEVINE. 200 pages. Cloth. New York University Press. New York. 1956. Price $5.00.

There are 78,000 deaf persons, and millions with impaired hearing in the United States. Still very little is known about their psychology, especially that of deaf children. The author attempts to give some information, and although unconscious mechanisms are not included (with the exception of the Rorschach test) the book is worth reading.

A Restless Breed. By J. WILLIAM TERRY. 254 pages. Cloth. World. Cleveland. 1956. Price $3.75.

A first novel describes in disconnected sketches, "the growing pains of a typical small town on the Ohio Land Reserve in the mid nineteenth century." It is the peculiar story of three sisters who looked for a single lover in common, and were otherwise Lesbians. Not the slightest explanation is provided for this absurdity.

Prehistoric Religion. By E. O. James. 300 pages including index. Cloth. Praeger. New York. 1957. Price $6.50.

Prehistoric Religion is the work of an authority on the history of religion, archeology and anthropology. It is of psychological and psychiatric interest in that it traces rituals which apparently have some claim to the title of religion as far back as the very primitive variety of man whose remains were found in the caves of Choukoutien. *Sinanthropus pekinensis* saved and arranged skulls, seemingly for ritual purposes. Much later Neanderthal man did much the same thing. In later paleolithic times, there is evidence, in the coloring of bones and other ceremonial aspects of burial, of a prevalent cult of the dead. Phallic emblems and images of the pregnant female go back far beyond history, with the apparent object of ritual control of natural processes. This book is a careful collection, summary and discussion of the evidence of some of the things man thought, felt and believed at a time when men had hardly attained the status of being human.

The Stars Above Us. The Conquest of Superstition. By Ernst Zinner. 141 pages including index. Cloth. Scribner's. New York. 1957. Price $3.00.

The Stars Above Us is a nicely illustrated monograph, dealing principally with the history of astronomy but also covering many related irrational or mistaken ideas men once had about the earth and the universe. The conquest of superstition, which is referred to in the book's sub-title, is largely the conquest of the superstition of astrology. Although Zinner does not say so, this was quite as important a matter to medicine, once based on astrology, as it was to astronomy. This short book is useful and entertaining. It is a pity that Zinner is both didactic and dogmatic about certain matters, the age of the sun, for instance, concerning which other astronomers would not be in full agreement.

New Light On The Most Ancient East. By V. Gordon Childe. 255 pages including index. Paper. Grove. New York. 1957. Price $1.75.

This is a paper-bound edition of a work first published by Frederick A. Praeger and is a very valuable discussion of man's rise to civilization in the great fertile crescent and eastward to Pakistan. It covers recent revisions of chronology in both Egypt and Mesopotamia and altogether is a complete and valuable little reference work, thoroughly documented to the original sources, for the territory covered. This volume should be of use to anybody concerned with the transition from pre-history to early history in any field from architecture to science. The paper-bound edition lacks 39 plates that were included in the original, but it is large value for its price without them.

The Amazing Advertising Business. By the editors of Fortune. 178 pages. Cloth. Simon and Schuster. New York. 1957. Price $3.50.

Ranging from criticism by the late Bernard De Voto to a reply by advertising executive Albert Lynd, this book offers interesting highlights of the advertising world. It is not technical or drab, but it is cursory in many respects.

The chapter entitled "What's the Motive?" dabbles in the psychological aspect of advertising. Motivation research is the author's (Perrin Stryker's) field, and he handles it daintily. His actual evaluation of psychology's worth in advertising is vague and indefinite. The fear is expressed that motivation research might lead to exploitation; and the conclusion, if there is one, seems to be, "Let's do it but let's not know we're doing it"—hence motivation research seems not worth its salt.

Other authors include; Richard Weil, Jr., advertising copywriter; Gerard B. Lambert, former part owner of the concern manufacturing Listerine; Daniel Seligman, Spencer Klaw, and Thomas P. Murphy.

Clues To Suicide. E. S. SCHNEIDMAN and N. L. FARBEROW, editors. 215 pages. Cloth. Blakiston Division, McGraw-Hill. New York. 1957. Price $5.50.

The editors, both clinical psychologists, have collected 18 studies written by both psychiatrists and psychologists. The book offers nothing new, but has, however, the merit of focusing attention on a neglected topic. It is, by the way, doubtful whether the statement is justifiable that "About half of all suicidal attempts are carried out by individuals with psychoneurotic depression." In general, Brill's estimate that 85 to 90 per cent of suicides belong to the depressive psychotic type, is the accepted one. An interesting feature is included in the book: There are 33 real and 33 simulated suicide notes.

Sexuality, Love and Immortality. By JOHN P. GRIP. 121 pages. Cloth. Philosophical Library. New York. 1956. Price $3.50.

This is a peculiarly incongruous book: On the one hand it advocates love of God by attempting to fight materialistic arguments; on the other, the author goes so far as to believe that great parts of sex should be diverted to higher aims. He seems not to be familiar with the newer psychiatric concepts of non-sexual love ("The fact of love cannot be explained in any scientific manner"). He rants against alcoholism and smoking, and considers even marital sex that is not serving procreative purposes to be "destructive." He also does not acknowledge the existence of the unconscious. The book gives the impression of being written by a man who does not adhere to any established religion, but creates his own.

Dance In Psychotherapy. By ELIZABETH ROSEN. 178 pages. Cloth. Bureau of Publications, Teachers College, Columbia University. New York. 1957. Price $4.50.

The introductory remarks state that "in this study the dance is presented as an activity capable of being utilized by patients whose social behavior limits their capacity to form personal relationships. The dance is seen as a medium through which initial interpersonal contact may be established."

After discussing the dance and its role in therapy, the author describes the dance programs at two mental hospitals. In conclusion, the reactions of the patient to the dance, to the leader and to the group, are discussed, as well as some of the objectives of the program.

This is a stimulating book. It is one more piece of ever-increasing evidence that psychotic patients can relate to others if given the opportunity and an understanding and non-threatening therapist. Dance therapy is no cure, but, as the author emphasizes, it may be the beginning of meaningful psychotherapy.

Youth In Danger. By R. C. HENDRICKSON and F. J. COOK. 300 pages. Cloth. Harcourt, Brace. New York. 1956. Price $3.95.

Senator Hendrickson, until recently chairman of the Senate Subcommittee on Juvenile Delinquency, reports his findings. The book arrives at intelligent, though incomplete, conclusions. The author acknowledges that a series of factors contributes to the problems. Of interest, is his stressing of the fact that his committee found that in Oklahoma City the gangs consisted, not of children of the poor, but of the comfortably situated parents, thus counteracting the popular misconception that juvenile delinquency is a prerogative of the slums. He even goes so far as to approve of "adequate social-service personnel in schools—with the psychological, medical, and social-service help needed to deal clinically with youngsters requiring special care and attention beyond that provided by the normal resources of the school." What is missing in the report is some understanding that the aggressive acts of these delinquent adolescents are only defenses against deeper, repressed stresses.

The Mentally Ill Child. By STEVEN B. GETZ, PH.D., and ELIZABETH LODGE REES, M.D. 88 pages including index. Cloth. Thomas. Springfield, Ill. 1957. Price $3.50.

This book should be read by all parents of mentally ill children. From it, parents can gain some understanding of their children's illness, with lessening of their own guilt and fear. If the practical advice given is followed, time and money and peace of mind will be saved in the long run.

Educating Spastic Children. The Education and Guidance of the Cerebral Palsied. By F. ELEANOR SCHONELL, M.A., Ph.D. IX and 242 pages. Cloth. Philosophical Library. New York. London. 1956. Price $6.00.

The main purpose of this book is to provide first-hand information of an educational and psychological kind for all concerned with the education, upbringing and general welfare of the cerebral palsied.

The book is based on experience and experiments in clinic and classroom, and on work with spastic children in all kinds of environments —home, hospital and school. It has both a scientific basis and a strong practical flavor.

While the book is based on English and Australian groups, American investigations are given.

The Secret of Meditation. By HANS-ULRICH RIEKER. 176 pages. Cloth. Philosophical Library. New York. 1957. Price $6.00.

"Know thyself" is the message of the author. Most of the book is a description of the practice of meditation through which, the author believes, a person can learn much about himself. However, meditation isn't easy. The author emphasizes the years of practice and the patience required if meditation is to prove of value. Nor does he feel that meditation can achieve its aim if a person's goal is his own aggrandizement.

The reviewer thinks it unlikely that meditation, as described in this book, will be practised by many Occidentals. We are too lazy, impatient —and even afraid that a look within may find the cupboard to be dirty and bare. It is precisely for these reasons that we need the message given here.

Comparative Psychology of Mental Development. By HEINZ WERNER. 564 pages including index. Cloth. International Universities Press. New York. 1957. Price $6.00.

In the introduction of this book, the basic problems and the methods of developmental psychology are discussed. Then the organization, imagery, action, thought-processes, and notions of time and space on a primitive level are studied. The last section deals with the spheres of reality as seen by the child, primitive man and the abnormal person.

The Hoods Take Over. By OVID DEMARIS. 160 pages. Paperbound. Fawcett. New York. 1957. Price 25 cents.

A typical gangster story is written without imagination, and with complete exclusion of psychological motivations.

The Organization Man. By WILLIAM H. WHYTE, JR. 429 pages including index. Cloth. Simon & Schuster. New York. 1956. Price $5.00.

This is a book that should be of interest to psychiatrists. It is a study of the effect of "organization" on our society and our reaction to it. It is primarily a study of the young executive but it also includes those in other fields that are affected by their organization—such as doctors, teachers, lawyers.

The author's charge against the social ethic is that it is not suited to the needs of modern man. He feels it is redundant, premature, delusory, static and self-destructive. He thinks that the group should be fitted to the person rather than the person to the group. The individual must fight the organization, but this must not be done simply to assuage neurotic hostility to authority. It must be done so that the individual can satisfy his needs and accomplish his task without submission to the group. Of course, in the end, the group and the individual reap the benefit.

Famous Criminal Cases 3. By RUPERT FURNEAUX. 209 pages. Cloth. Roy. New York. 1957. Price $3.50.

This collection of short reports on British criminal cases is of interest to the criminologist and the student of criminal psychology. Its material is not readily available elsewhere, since some of the cases were officially unsolved and others resulted in acquittal. A dozen are reported in this book. Followers of the Notable British Trials series will appreciate having this as a supplement.

For People Under Pressure. By D. H. FINK. 274 pages. Cloth. Simon & Schuster. New York. 1956. Price $3.50.

There is no objection to popularization of psychologic phenomena, provided the simplification does not dispose of the facts. When, however, the facts are simplified to such a degree that they match the naïve reader's ignorance, the question arises as to the permissibility of the procedure. The present volume does this.

The Power of Self-Knowledge. By MILTON W. WHITE. 225 pages. Cloth. Julian Press. New York. 1957. Price $3.95.

Self-help books, written by a physician, are ambiguous: One never knows whether the author was "prompted" by the publisher to make "concessions," or is really naïve enough to believe what he says in the text. This book is no exception: Obviously only inner negation of the unconscious can prompt a physician to declare that conscious self-help in emotional problems is possible.

Remotivating the Mental Patient. By OTTO VON MERING, PH.D., and STANLEY H. KING, PH.D. 216 pages including index. Cloth. Russell Sage Foundation. New York. 1957. Price $3.00.

This book illustrates what can be done to solve many of the problems that plague mental hospitals. It demonstrates what can be accomplished without necessarily increasing the size of the staff or the budget of the hospital. What the authors also indicate is that remotivation of the staff of the mental hospital must precede any program for remotivating the patients. This remotivation of the staff begins when a hopeless attitude toward mental illness is replaced by the philosophy that all mental patients can be helped to higher levels of adjustment. Even if the higher level of adjustment is not high enough for the patient to adjust in the community, the patient is nevertheless, better off, and so are the hospital and the other patients.

Dark Don't Catch Me. By VIN PACKER. 192 pages. Paper. Gold Medal-Fawcett. New York. 1956. Price 35 cents.

This is a badly written story about lynching a young colored boy, suspected of "clucking his tongue" at a white woman "in heat" in the deep South. There is agreement that the treatment of colored people in the South is unjust; this, however, does not mean that the case is helped by such tendentious stories as this one, heavily loaded against the white population.

The Office Assistant in Medical or Dental Practice. By PORTIA M. FREDERICK. VII and 351 pages. Cloth. Saunders. Philadelphia. 1956. Price $4.75.

This work appears to be an excellent source book for the student, the individual employed in practice and the doctor. It provides a general orientation to the whole field. Most significant is the emphasis on human relationships and the cultivation of the patients' good will.

Child Psychiatry. Third edition. By LEO KANNER. M.D. 777 pages including index. Cloth. Thomas. Springfield, Ill. 1957. Price $8.50.

Little can be added to the plaudits this book has received since its first edition was published. It is practical in its orientation. It is comprehensive. The author writes with clarity and simplicity so that the book is useful to parents and teachers as well as to specialists in the psychiatric field. This reviewer predicts that this edition will be as popular as the previous ones.

CONTRIBUTORS TO THIS ISSUE

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He was a fellow in neuropathology at the New York State Psychiatric Institute from 1939 to 1941, and was on the staff at Pilgrim (N.Y.) State Hospital from 1941 to 1946. Dr. Arieti has written many articles, including previous publications in this QUARTERLY, and a book, *Interpretation of Schizophrenia.*

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Following his residency, he served two years as a psychiatrist at the U. S. Public Health Service Hospital in New Orleans, and taught at Tulane University Medical School. At the present time, he is a staff psychiatrist at the Lafayette Clinic and an instructor at Wayne University College of Medicine in Detroit. He is a member of medical and psychiatric professional organizations and has published several articles on psychiatric subjects. He became a diplomate of the American Board of Psychiatry and Neurology in psychiatry in 1956.

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Dr. Drasgow has been a Psychological Corporation market research associate and has done psychotherapy and experimental psychology. He has contributed scientific articles to half a dozen scientific journals, including THE PSYCHIATRIC QUARTERLY. He is a member of numerous professional organizations. Dr. Drasgow is married and has two children. Among his varied professional and educational interests, he is faculty adviser to the University of Buffalo Chess Club.

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SOLOMON KUNOFSKY. Mr. Kunofsky is a biostatistician in the division of tuberculosis control of the New York State Department of Health. He is a graduate of Siena College, and a member of the American Statistical Association and of the American Public Health Association. He is co-author of several papers on the epidemiology of tuberculosis among patients in mental institutions.

BEN Z. LOCKE. Mr. Locke received his M.S. degree from the Columbia University School of Public Health. At the time of writing the paper on tuberculosis in schizophrenia which appears in this issue of THE QUARTERLY, he was senior biostatistician in the New York State Department of Health. At present he is chief of the consultation section, biometries branch, of the National Institute of Mental Health, U. S. Public Health Service.

CHARLES H. JONES, M.D. Dr. Jones has been superintendent of Northern State Hospital, Sedro Wooley, Washington since January 1950. He had joined the Washington state service in December 1946 as a resident in psychiatry at Western State Hospital, Fort Steilacoom. A native of Washington, Dr. Jones was graduated from the University of Washington in Seattle, then received his medical education at the University of Oregon Medical School. Following graduation in 1943 he served a rotating internship at the San Diego County General Hospital. During military service, from 1943 to 1946, he was graduated from the school of military neuropsychiatry at Mason General Hospital and was neuropsychiatrist on the Aleutian island of Shemya for 18 months.

Dr. Jones has been certified as a mental hospital administrator by the American Psychiatric Association and is a diplomate in psychiatry of the American Board of Psychiatry and Neurology. He is president-elect of the North Pacific District Branch of the American Psychiatric

Association, having previously served as secretary-treasurer and as executive committee member.

Dr. Jones is the author of a number of scientific articles. He is a fellow of the American Psychiatric Association and a member of other professional organizations. He is married and has four children.

WILLIAM KARLINER, M.D. Dr. Karliner is in the private practice of neurology and psychiatry in New York City and Scarsdale. He is a graduate of the University of Vienna where he received his medical degree in 1935. He is the author of numerous scientific articles and holds a number of hospital positions in the New York City area. He is associate psychiatrist at Hillside Hospital and chief of the shock therapy department at Lebanon Hospital. Dr. Karliner is a fellow of the American Psychiatric Association, a member of the Association for Research in Nervous and Mental Disease, of the American Academy of Neurology and of numerous other professional organizations.

MARIAN AXEL, M.D. Dr. Axel is psychiatrist in charge of the Day Care Center, Poughkeepsie, an independent New York State pilot project which completed a year of existence in July 1957 and has attracted much interest in general psychiatric circles.

Born in 1900 in Cracow, Dr. Axel was educated in that city and in Vienna, obtaining his bachelor's degree from the Jagellonic University of Cracow in 1923 and his medical degree from the same university in 1926. He served in various Vienna, Paris and Berlin clinics in endocrinological and biological research, also studying psychiatry and psychoanalysis. After a few years of private practice, he held a number of Polish government posts and was national director of prophylactics for the Polish ministry of health and the National Insurance System in 1938 and 1939.

Dr. Axel served successively with the Polish, French and British armed forces during the early years of World War II and was with the Polish government in exile in London as a medical expert from 1942 to 1945. After three years of general practice in London, he came to the United States and has been associated with Hudson River (N.Y.) State Hospital since 1951. Before assuming charge of the Day Care Center, he was supervising psychiatrist at Hudson River in charge of a large semi-disturbed female service. He is a member of the American Psychiatric Association and other professional organizations. His principal psychiatric interests are research in schizophrenia and work in preventive psychiatry.

I. HYMAN WEILAND, M.D. Dr. Weiland is assistant director of the children's unit, Eastern Pennsylvania Psychiatric Institute, Philadelphia. Until 1955 when he entered naval service, he was in private practice of psychiatry and child psychiatry at Seattle, Washington, was in charge of psychotherapy at Seattle Children's Home, and was on the faculty of Pinel Foundation Hospital. Before his entry into private practice in December 1953, he was on the faculty of the University of Washington School of Medicine, department of psychiatry. Previously he had been on the faculty and in residency training at Cincinnati General Hospital where he also took his medical degree. Dr. Weiland is a diplomate in psychiatry of the American Board of Psychiatry and Neurology. He is a member of the American Psychiatric Association and other professional organizations.

ALLAN R. LEIDER, M.D. Dr. Leider was graduated from the University of Minnesota Medical School in 1946. He interned at West Suburban Hospital, Oak Park, Ill., and was a resident in psychiatry at the University of Minnesota and Veterans Administration hospitals, Minneapolis, from 1948 to 1951. Since 1951, he has been on the staff of the Psychiatric Clinic for Children and the Child Health Center, and an instructor in the Department of Psychiatry, University of Washington School of Medicine, Seattle, Washington. Dr. Leider's primary interests are in child psychiatry and the dynamics of family relationships.

CHARLES A. MANGHAM, M.D. Dr. Mangham is a graduate of the University of Virginia School of Medicine in 1942, and is now in private practice with the Northwest Clinic of Psychiatry and Neurology. He is a psychoanalytic candidate with the Seattle Training Center of the San Francisco Institute for Psychoanalysis and he is a clinical instructor in the department of psychiatry, University of Washington School of Medicine.

ALEXANDRA SYMONDS, M.D. Dr. Symonds is a senior psychiatrist on the staff of Bellevue Psychiatric Hospital. She is a graduate of New York Medical College in 1948 and is certified by the National Board of Medical Examiners. She is a member of the American Psychiatric Association and of other professional organizations. Dr. Symonds served her internship and had residencies in neuropsychiatry at the United States Public Health Service hospitals at Staten Island and Ellis Island, New

York City, before her psychiatric residency at Bellevue, where she is still on the staff. She has taught adolescent psychiatry at New York University College of Medicine, and is an associate psychoanalyst of the Karen Horney Clinic.

MORRIS HERMAN, M.D. Dr. Herman is professor of psychiatry at New York University-Bellevue Medical Center. Born in 1906 in New York City, he received his medical degree from New York University in 1930. He interned at Bellevue and has been connected with that hospital in associate and visiting capacities for most of the time since. He is certified in both psychiatry and neurology, is a fellow of the American Psychiatric Association and the American Neurological Association, and is a member of numerous other professional organizations.

LEON ROIZIN, M.D. Dr. Roizin is principal research scientist (neuropathology) in the New York State Psychiatric Institute, New York City, and associate professor of neuropathology, department of pathology, College of Physicians and Surgeons, Columbia University. He obtained his M.D. degree from the Royal University of Milan in 1936. His medical training has included scholarships and fellowships in neurophysiology, neurology, psychiatry, pathology and neuropathology.

Before coming to the United States, Dr. Roizin was assistant in neurology and psychiatry at the Royal University of Pavia, Italy (1936 and 1939), and assistant in the department of pathology, St. Paul University, Brazil (1939-1940). Since 1940, he has been affiliated with the New York State Psychiatric Institute and Columbia University. He is certified in neurology and psychiatry by the American Board of Psychiatry and Neurology and certified in neuropathology by the American Board of Pathology. He is consultant in neuropathology at the Veterans Administration New York Regional Office. He is a fellow of the American Medical Association and of the Academy of Neurology and a member of various medical and scientific national associations. He is author and co-author of 71 scientific publications.

NEWS AND COMMENT

SUBSCRIPTION PRICE OF QUARTERLY IS INCREASED

Effective with the issue of October 1957, the annual subscription rate of THE PSYCHIATRIC QUARTERLY will be increased to $8.00 a year, $8.50 for foreign subscriptions. The price of single issues will be advanced to $2.25 a copy, $2.35 foreign. THE PSYCHIATRIC QUARTERLY SUPPLEMENT, published twice a year, will cost $4.00 a year ($4.25 foreign), effective with Part 2, 1957, with single issues priced, like THE QUARTERLY, at $2.25 ($2.35 foreign).

Subscriptions to THE QUARTERLY, mailed before receipt of this issue, will, of course, be accepted at the old rate, as will subscriptions to THE SUPPLEMENT which are mailed before receipt of Part 1, 1957 in which the notice of the price change for that journal appears.

THE QUARTERLY and SUPPLEMENT are non-profit enterprises, published as a public service and as a service to medical science by the New York State Department of Mental Hygiene; they do not seek to make money; but they do seek to meet publication costs. At the new and increased subscription rate, there will be only one other journal in the psychiatric field of comparable size to THE QUARTERLY with as low subscription charges; most others are appreciably higher. Unlike most other comparable journals, THE QUARTERLY and THE SUPPLEMENT cannot supplement their income by advertising, since they cannot accept paid advertising. Besides advertising revenues, many other journals in the field derive income from association or foundation subsidy.

The present QUARTERLY and SUPPLEMENT subscription increases have been long overdue. The new rates will apply in future to all orders for old issues, which will be accepted at current prices, not at the lower ones prevailing at the time of printing. This charging of current prices for back issues is in accordance with a common procedure. Some publications charge premiums for old issues, increasing the price with the age of the issue.

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20TH GENERAL SEMANTICS SEMINAR ANNOUNCED

The twentieth winter holiday seminar of the Institute of General Semantics has been announced for a period shortly after Christmas—December 27, 1957 to January 4, 1958. There will be 40 hours of lectures, discussions and nonverbal training. The meeting will be at Lime Rock Lodge in the Berkshire Hills, and information may be obtained from the Institute of General Semantics, Lakesville, Conn.

FRIEDA FROMM-REICHMANN, M.D., PSYCHOANALYST, DIES

Frieda Fromm-Reichmann, M.D., internationally-known psychoanalyst and a specialist in the psychotherapy of schizophrenia, died at her home on the grounds of Chestnut Lodge, Rockville, Md., on April 28, following a heart attack. She was 67 years old. Dr. Fromm-Reichmann, born in Germany, received her medical degree from the University of Königsberg in 1913. She was in charge of a hospital for brain-injured soldiers at Königsberg during World War I and also was engaged then in research in brain injuries. She did postgraduate work and psychoanalytic study at Königsberg, Munich and Berlin until 1923, later holding sanatoria positions, and teaching at the Frankfort Psychoanalytic Institute. Dr. Fromm-Reichmann came to this country in 1934 and had been associated with Chestnut Lodge since that time. She was chairman of the faculty of the Washington School of Psychiatry for some years. Dr. Fromm-Reichmann was the author of several books, including *Principles of Intensive Psychotherapy*, and of numerous scientific articles. She was a member of the American Psychoanalytic Association and a fellow of the American Psychiatric Association.

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CONGRESS ON LEGAL MEDICINE AND LAW MEETS

What is described as the first American congress on legal medicine and law was conducted in Chicago from July 8 to 20, 1957 under the auspices of the Law-Science Institute of the Schools of Law and Medicine of the University of Texas. The congress replaced the annual Chicago law-science short course; and the planning was under the general direction of Hubert Winston Smith, LL.B., M.D., professor of law and of legal medicine at the University of Texas. Besides the general discussion of points of psychiatric interest in connection with wider subjects, 10 or more of the special sessions were devoted to topics of primary interest to psychiatry and neurology.

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FORMER COMMISSIONER F. W. PARSONS, M.D., DIES AT 81

Frederick W. Parsons, M.D., New York State Commissioner of Mental Hygiene from 1927 to 1937, died in New York City on July 5 at the age of 81. Appointed commissioner by Governor Alfred E. Smith, he was reappointed by Governors Roosevelt and Lehman. Born in 1875 in Buffalo, Dr. Parsons received his medical degree from the University of Buffalo in 1901. He had a long career in the New York State hospital service, served on the staff at Hudson River for a number of years and was superintendent of Buffalo State Hospital when he was appointed commissioner in 1927.

SUPPLEMENT HAS PAPERS OF UNUSUAL INTEREST

Several articles of unusual interest to psychiatrists and clinical psychologists, as well as to members of the ancillary disciplines generally, are included in an issue of THE PSYCHIATRIC QUARTERLY SUPPLEMENT which has just come off the press. It is Part 1, 1957.

The leading article is a paper by Edward F. Kerman, M.D., concerning a new three-dimensional projective test, employing replicas of "cypress knees," and devised by Dr. Kerman. The test involves object-choice and suggests, in addition, a three-dimensional technique resembling the Rorschach, and one resembling the TAT. The test which has been named the (KCK) for "Kerman Cypress Knee" test, is now in process of being standarized by more than half a dozen workers (both psychologists and psychiatrists) who are using it independently in different institutions and areas, with varied types of test populations. The author is interested in having more work done in establishing norms; readers who are unable to consult THE SUPPLEMENT may write to Dr. Kerman at 3700 Liberty Heights Avenue, Baltimore 15, Md. The full title of the article is "Cypress Knees: A New Three-Dimensional Projective Technic (KCK)." Dr. Kerman can supply reprints—and he can possibly supply test material to a limited number of qualified workers.

Other unusual papers in this issue of THE SUPPLEMENT include "Phenomenology and Thinking Disorder in Some Fire-Setting Children" by Jerome S. Silverman, M.D., and "The Doctor and Patient Roles in a Therapeutic Community" by Seymour Parker, Ph.D. This is a description and discussion of the workings of the famous English institution headed by Dr. Maxwell Jones, the Belmont Social Rehabilitation Unit, in which patients in an open-door setting take an active part in the administration and maintenance of their hospital.

The editorial comment in this SUPPLEMENT is a discussion of anality, or anal erotism, its contribution to civilization generally and present-day society in particular, and some of the drawbacks caused when it is overemphasized. It is entitled "*In Laude Latrinae.*"

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NEW YORK BOOKLET FOR RELATIVES PUBLISHED

The New York State Department of Mental Hygiene is publishing a booklet for relatives and friends of persons who enter mental hospitals. It is entitled "Give Them Your Hand" and is an illustrated, 29-page pamphlet of information and advice, covering admission procedure, showing how patients live in the hospital, how they eat, their recreational facilities, types of treatment and other matters of interest and concern to relatives and visitors.

DR. LOWREY, AUTHORITY ON CHILD PSYCHIATRY, DIES

Lawson G. Lowrey, M.D., specialist in child psychiatry and child guidance, died in New York City of a heart ailment on August 16, 1957. He was 66 and had been in practice in New York since 1933.

Born in Missouri, Dr. Lowrey received his bachelor's and master's degrees from the University of Missouri, then attended Harvard, where he received his medical degree cum laude in 1915. He taught at Missouri, Utah, Harvard, the University of Iowa, Southern Methodist, the University of Minnesota and Western Reserve. In 1927, he went to New York City to direct the new Institute of Child Guidance, which was organized with a grant from the Commonwealth Fund. He served numerous hospitals and other organizations in the New York area in advisory and consulting capacity, and from 1945 to 1956 was assistant clinical professor of psychiatry at the College of Physicians and Surgeons, Columbia University.

Dr. Lowrey wrote on many phases of childhood intellectual and emotional functioning. He served from 1933 to 1935 with the Clinic for Gifted Children at New York University, and among his articles were a number critical of undue public attention to child prodigies; he pointed out that publicity could affect them adversely as adults. Dr. Lowrey was the author of several books and a large number of scientific articles, including contributions to THE PSYCHIATRIC QUARTERLY. He is survived by two sons, two daughters and a brother.

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GUTTMACHER IS ISAAC RAY LECTURER

Manfred S. Guttmacher, psychiatrist and chief medical officer of the Supreme Bench of Baltimore, is the sixth winner of the $1,000 Isaac Ray Lectureship Award of the American Psychiatric Association, it was announced at the psychiatric association annual meeting in May 1957. The award is given annually to a psychiatrist, judge or attorney for an important contribution to better understanding between psychiatry and law. Dr. Guttmacher is to deliver a series of lectures on psychiatry and the law at the University of Minnesota during the present academic year.

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PSYCHOPATHIC HOSPITAL NAME IS CHANGED

The Syracuse Psychopathic Hospital, a New York State Department of Mental Hygiene institution since 1930, became the Syracuse Psychiatric Hospital by the terms of a law passed by the 1957 legislature and signed by Governor Harriman. The hospital is primarily a research institution which is now headed by Marc H. Hollender, M.D., professor and chairman of the department of psychiatry of the State University College of Medicine at Syracuse.

ERNST KRIS, PSYCHOANALYST, PUPIL OF FREUD, DIES

Ernst Kris, Ph.D., teacher, art historian, psychoanalyst and pupil of Sigmund Freud, died in New York City on February 27. Born in 1900 in Vienna, young Kris advanced amazingly as a student; when the public schools were closed because of a fuel shortage during World War I, he attended classes at the history of art department of the University of Vienna, attracting attention as an outstanding student—a matter which caused some embarrassment when it was found he was not only not matriculated but was too young to matriculate. He eventually acquired his Ph.D. and obtained a state position as a museum custodian where he wrote what became recognized as the standard treatise on Renaissance intaglios and cameos. He met Freud through the latter's interest in this subject, was eventually analyzed and eventually became a practitioner and an editor of *Imago*. He had a substantial European reputation when he left the Continent following Hitler's absorption of Austria.

Dr. Kris engaged in further writing and editing in London, then served the British in the analysis of German war propaganda before coming to the United States in 1940. In this country, he has been known as an outstanding teacher, research worker and writer, and was considered one of the foremost workers in the development of modern ego-psychology. He was recently engaged in child research analysis at Yale.

Dr. Kris was author or editor of numerous psychoanalytic works. He wrote the introduction to Freud's letters to Wilhelm Fliess, a discussion considered a masterly report of the origins of psychoanalysis. Dr. Kris was one of the few honorary members of the New York Psychoanalytic Society and the American Psychoanalytic Association, full membership in both of which is restricted to psychoanalyst physicians. He was married in Vienna to Marianne Rie who survives him. Marianne Kris, M.D., is both a psychiatrist and a psychoanalyst in practice in New York. There are two children.

CHILDREN'S DAY-HOSPITAL IS INAUGURATED

The Des Moines (Iowa) Child Guidance Center has announced the inauguration of a "day-hospital" project under a grant from the National Institute of Mental Health. The center announces its aims as: (1) to provide intensive therapy with lesser psychological and economic difficulties than are involved in hospitalization; (2) to do intensive diagnostic study and treatment; and (3) to evaluate the effectiveness of day-hospital care for children as compared with outpatient care. A new building is being erected to house the day-hospital.

E. E. HITSCHMANN, M.D., PUPIL OF FREUD, DIES AT 86

Dr. Edward E. Hitschmann of Cambridge, Mass., psychoanalyst, author and pupil of Sigmund Freud, died in Gloucester, Mass., on July 31, 1957 at the age of 86. Born in Vienna, Dr. Hitschmann received his medical degree from the University of Vienna in 1895. In 1905 he registered at the university for a course of lectures given by Dr. Freud and later joined the weekly study group that met at Freud's home. Dr. Hitschmann practised psychoanalysis from that time until his death. He had been in the United States since 1940. He was a member of the faculty and a training psychoanalyst of the Boston Psychoanalytic Institute. Dr. Hitschmann was a member of the Boston Psychoanalytic Society and of the American Psychoanalytic Association. He had written more than 100 books and scientific articles on subjects ranging from psychoanalysis to internal medicine. His book, *Freud's Theories of Neuroses*, published in 1909, was one of the first textbooks on psychoanalysis to be approved by Freud. His latest work was *Great Men: Psychoanalytic Studies*, published last year. It included studies of Schopenhauer, Goethe, Eckermann, Samuel Johnson, Boswell, Brahms and Swedenborg. Dr. Hitschmann leaves his widow and a daughter, Dr. Margaret H. Margolin, who is associate professor of psychiatry and psychoanalysis at the University of Colorado School of Medicine. There are two grandchildren.

KARDINER AND McGRAW RETIRE

Abram Kardiner, M.D., retired as director of the Columbia Psychoanalytic Clinic for Training and Research, and Robert B. McGraw, M.D., retired as chief of the psychiatric clinic, Vanderbilt Clinic on June 30, 1957. George E. Daniels, M.D., has succeeded Dr. Kardiner at the psychoanalytic clinic, and Robert Senescu, M.D., has become chief of the Vanderbilt psychiatric clinic. Dr. David M. Levy has retired as clinical professor of psychiatry at the College of Physicians and Surgeons, Columbia University. Drs. Kardiner, McGraw and Levy will all maintain connections with the department of psychiatry of the College of Physicians and Surgeons, but in lecturing or executive committee capacities.

PSYCHOSOMATIC SOCIETY INSTALLS OFFICERS

Theodore Lidz, M.D., took office as president at the annual business meeting of the American Psychosomatic Society in Atlantic City on May 4, 1957. Milton Rosenbaum, M.D., became president-elect and Morton F. Reiser, M.D., secretary-treasurer. The fifteenth annual meeting of the society will be held next March in Cincinnati.

NEW YORK STATE APPOINTMENTS MADE IN 1957

A number of important appointments in New York State hospital and department administrative personnel were announced during the first nine months of 1957. They are: Marc H. Hollender, M.D., director of Syracuse Psychiatric Hospital; L. Laramour Bryan, M.D., deputy assistant commissioner of the Department of Mental Hygiene; Charles Greenberg, M.D., senior director of Rome State School; Arthur G. Rodgers, M.D., director of Syracuse State School; Ulysses Schutzer, M.B., Ch.B., director of Binghamton State Hospital; Helen E. Elliott, M.D., deputy assistant commissioner of the Department of Mental Hygiene; Robert C. Hunt, M.D., director of Hudson River State Hospital; and George L. Warner, M.D., director of Craig Colony, the New York State institution for epileptics. Portraits and biographical sketches of the new officials appear in Part 1 of the 1957 PSYCHIATRIC QUARTERLY SUPPLEMENT.

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ASSOCIATION ANNUAL MEETINGS ARE HELD

Harry C. Solomon, M.D., took office as president, and Francis J. Gerty, M.D., became president-elect at the annual meeting of the American Psychiatric Association in Chicago, in May 1957. Professor Chris J. DeProspo of the College of the City of New York became president of the American Association of Mental Deficiency at that organization's annual meeting in May in Hartford; George Tarjan, M.D., became president-elect. The presidential address at the psychiatric association meeting was by the retiring president, Francis J. Braceland, M.D., and that at the mental deficiency session was by the retiring president, Thomas L. McCulloch, Ph.D., who is head of the psychology department at Letchworth Village, New York State Department of Mental Hygiene school for mental defectives.

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MENNINGER AWARD IS ANNOUNCED

The first Charles Frederick Menninger Award was conferred on Dr. Charles Fisher of Mount Sinai Hospital, New York, at the annual meeting of the American Psychoanalytic Association on May 12, 1957. The award, established by Drs. Karl A. and William C. Menninger as a memorial to their father, is to be given annually for original research in psychoanalysis. Dr. Fisher received it in recognition of experimental work on the role of primary modes of perception in dream formation.

BACK NUMBERS WANTED

Copies of a number of back issues of THE PSYCHIATRIC QUARTERLY and SUPPLEMENT are needed to complete sets

Copies of any or all of those listed here—unmarked and in good condition—will be accepted by The State Hospitals Press, Utica, N. Y. on the exchange terms stated below.

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